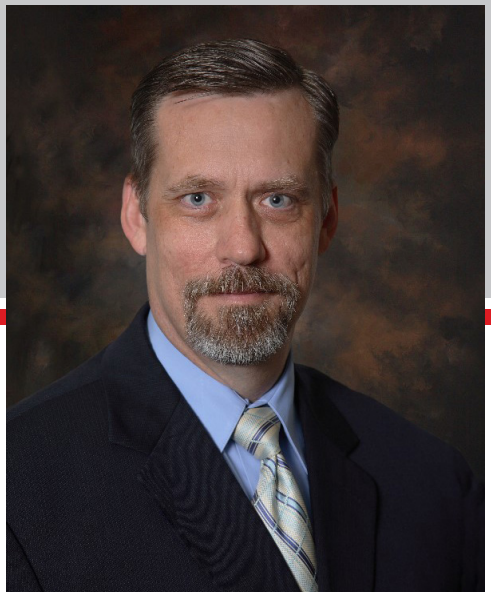
TEXAS TECH UNIVERSITY HEALTH SCIENCES CENTER™

32nd ANNUAL PERMIAN BASIN RESEARCH DAY

APRIL 20, 2023

WELCOME



Timothy Benton, M.D.

REGIONAL DEAN AND PROFESSOR, SCHOOL OF MEDICINE
TEXAS TECH UNIVERSITY HEALTH SCIENCES CENTER
AT THE PERMIAN BASIN

An inspiring mission and vision incorporate elements of giving back and adding value to others' lives. At TTUHSC we strive for excellence in education, patient care, and advancing knowledge through research in order to "enrich the lives of others." Discovery and innovation open doors, achieving leadership milestones in basic sciences, clinical medicine, and progressing to translated research to communities and populations that result in transformative healthcare delivery. In the end, research gives back to society and we are once again thankful for this opportunity to share how TTUHSC Permian Basin is collaboratively impacting our region.

Dr. Benton joined the TTUHSC School of Medicine faculty in Amarillo in 2005, where he served as the Associate Residency Program Director and eventually the Program Director. In 2012, he was recruited to be the Regional Chair of the Department of Family and Community Medicine in the Permian Basin and held that position for nine years. He began focusing his energies on the residency program and patient care. His tireless work as Regional Chair includes the following highlights:

- Primary care expansion and access to care (department patient visits up from 18,000 to 22,000 per year)
- Numerous community healthcare collaborations with the UT Permian Basin, and Odessa College, the Ector County Health Department (Associate Health Authority), the Permian Basin Community Center Clinic, and others; along with an active working relationship with both Midland Memorial Hospital and Medical Center Hospital
- Expansion of the Family Medicine residency program from 6 positions to 16 positions per year (recent spotlight in the April 2021 Texas Medicine edition); it is now the second largest FM residency and the largest FM rural training track in Texas
- Development of a rural residency training program with Andrews, Fort Stockton, and Sweetwater, Texas
- Orchestrating a Hospitalist Fellowship Program
- Awarded an 1115 Waiver Grant of $3 million
- Growing the departmental faculty from 6 to 17+
- Collaboration with and medical director for the TTUHSC School of Health Professions Physician Assistant program

Although internationally published in primary care guides, his current interest in Translational Research level 3-4 (T3-T4) for broad public dissemination of best practices through the application of leadership principles and community engagement.

Scientific Organizing Committee for Research Day 2023

KUSHAL GANDHI, PH.D.
Chair, Scientific Organizing Committee

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RAMA CHEMITIGANTI, M.D.

NIMAT ALAM, M.D.

BARATH RANGASWAMY, M.D.

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LAVI OUD, M.D.
Associate Regional Dean for Research

GARY VENTOLINI, M.D., FACOG, FAAFP

MICHAEL GALLOWAY, M.D.

SRIKANTH MUKKERA, M.D.

Scientific Organizing Committee for Research Day 2023

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CHINTAN TRIVEDI, M.D.

SHAKIRA MELTAN, MS-3

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CHINTAN TRIVEDI, M.D.

MUHAMMAD WAQAR SHARIF, M.D.

SHAKIRA MELTAN, MS-3

MUHAMMAD QUDRAT ULLAH, M.D.

Schedule:

ORAL PRESENTATIONS AND KEYNOTE SPEAKERS

8:00-8:15	Welcome note: **TIMOTHY BENTON, M.D.**
8:15-8:30	**JOUD ENABI, M.D.:** A Rare Case of Scleromyxedema in a Patient with Mgus
8:30-8:45	**LUTFOR NESSA, M.D., MPH:** Isolated Ear Auricle Coccidiomycosis: A Rare and Challenging Diagnosis
8:45-9:00	**CHINTAN TRIVEDI, M.D. AND MAHWISH ADNAN, M.D.:** Exploring the Link Between Gambling and Suicidal Thoughts in Individuals with Bipolar Disorder: An Analysis of National Inpatient Sample Dataset
9:00-9:15	**SERINE THOMAS, M.D.:** *Britght Ideas in Dark Spaces*
9:15-9:30	**LUTFOR NESSA, M.D., MPH:** Reducing Hospital CAUTI (Catheter-Associated Urinary Tract Infection) Rates – Quality Improvement Project in Infection Control
9:30-9:45	**PEDRO ROJAS, M.D.:** Apixaban Related Adrenal Hemorrhage and Primary Adrenal Insufficiency
9:45-10:00	**MICHELE BENDER, PHARMD:** Bolus of Insulin versus No Bolus in the Treatment of Diabetic Ketoacidosisy
10:00:10:15	**JOUD ENABI, M.D. AND LUTFOR NESSA, M.D.:** Applying the Business Model Canvas to Future Career Planning
10:15-10:30	**COFFEE BREAK**

10:30-10:45	**MARIA CANCI, M.D.:** Internal Hernia at Peterson Space with 720 Degree Rotation
10:45-11:00	**RAMI AL-AYYUBI, M.D.:** A Curious Case of Cutaneous Small Vessel Vasculitis
11:00-11:15	**JOUD ENABI, M.D.:** Training in Calling Consults: Training in Calling Consults: A Team Based Learning Workshop for Incoming Residents on Effective Inter-Professional Communication
11:15-11:30	**ALICIA CHAVEZ, PHARMD:** Assessing the Frequency of Redosing Surfactants: A Retrospective Study
11:30-11:45	**LUTFOR NESSA, M.D., MPH:** The Silent Danger: Uncovering the Link Between Hypothyroidism and Rhabdomyolysis
11:45-12:00	**DANNEL DIAZ RUIZ, M.D.:** Double Trouble! A Case of Idiopathic Hypoparathyroidism and Fahr Syndrome
12:00-1:00	**LUNCH BREAK**
1:00-2:10	**KEYNOTE ADDRESSES, JOHN GARZA, PH.D., ADRIAN BILLINGS, M.D., AND CHWAN-LI (LESLIE) SHEN, PH.D., C.C.R.P.:** Strategies for Health Professionals Interested in Starting Scholarly Activities.
2:10-2:15	Closing Remark, **VANI SELVAN, M.D.**

Keynote Speakers

John Garza, Ph.D.

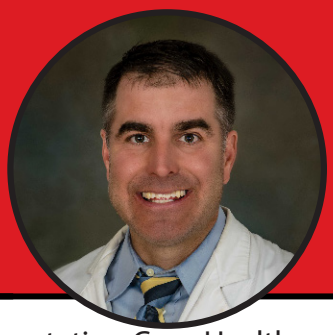
ASSISTANT PROFESSOR IN THE DEPARTMENT OF MATHEMATICS,

THE UNIVERSITY OF TEXAS PERMIAN BASIN, ODESSA, TX

John Garza is a 4th year volunteer Biostatistician for TTUHSC-Permian Basin who has assisted in the publication of over fifty articles, case reports, and abstracts while working with students, residents and faculty. He is a tenure track assistant professor in the Department Of Mathematics at the University of Texas, Permian Basin in Odessa. He earned Bachelors and Doctor of Philosophy Degrees in Pure Mathematics from the University of Texas at Austin. He has experience in big data analytics for health care research, the geometric partitioning of multivariate data clouds, and basic statistics. He is also an Associate of the Society of Actuaries.

Adrian Billings, M.D.

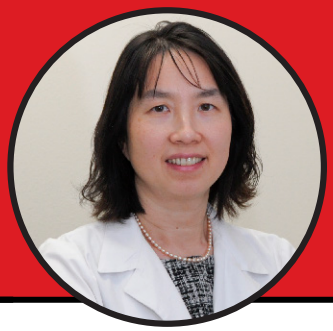
ASSOCIATE PROFESSOR IN THE DEPARTMENT OF FAMILY AND COMMUNITY MEDICINE,
TEXAS TECH UNIVERSITY HEALTH SCIENCES CENTER, ODESSA, TX



Dr. Adrian Billings is a full spectrum family medicine physician with Preventative Care Health Services (PCHS), a federally qualified health center, practicing in rural Alpine, Marfa and Presidio, Texas along the Texas-Mexico border. Dr. Billings currently serves as chief medical officer for PCHS, is an Associate Professor with the Department of Family and Community Medicine of Texas Tech University Health Sciences Center-Permian Basin, and is the immediate past chief of staff of Big Bend Regional Medical Center, a critical access hospital, in Alpine, Texas. Additionally, Dr. Billings serves as Medical Director for the City of Presidio Emergency Medical Services. He currently serves on the board of directors of the Association of Clinicians for the Underserved – an organization founded by alumni of the National Health Service Corps (NHSC) as well as serving on the board of the Texas Academy of Family Physicians. He is also the director of the Texas Statewide Family Medicine Preceptorship Program. Dr. Billings serves as Co-President of the Presidio-Ojinaga Binational Health Council which brings together US and Mexican healthcare officials together to discuss binational health problems that affect both sides of the United States and Mexico.

Chwan-Li (Leslie) Shen, Ph.D., C.C.R.P.

ASSOCIATE DEAN FOR RESEARCH AND PROFESSOR OF PATHOLOGY AND PHYSIOLOGY,
TEXAS TECH UNIVERSITY HEALTH SCIENCES CENTER, LUBBOCK, TX



Dr. Chwan-Li (Leslie) Shen is an Associate Dean for Research and Professor of Pathology and Physiology, School of Medicine, Texas Tech University Health Sciences Center, Lubbock, Texas, USA. Dr. Shen obtained her B.S. degree from Providence University, Taiwan, her MS degree from Texas Tech University, Texas, and her PhD degree from Purdue University, Indiana, USA. Within her faculty career, she has developed a broad range of expertise in molecular mechanisms, animal models, and clinical trials using bioactive compounds/phytochemicals in the management of chronic diseases including osteoporosis, osteoarthritis, sarcopenia, diabetes, obesity, and neuropathic pain. Dr. Shen has successfully translated her animal study results into human clinical trials and her translational research program has been funded by federal (National Institutes of Health and United States Department of Agriculture), industry, and foundations. In addition, Dr. Shen's research and presentations are well received by national scientific societies and public media. Dr. Shen has published 129 journal papers, 3 book chapters, and made 140+ national and international conference/invited talks. She served as the Associate Editor for "Nutrition Reviews" and "Frontiers in Nutrition", as well editorial board member of 15 journals in the area of nutrition/exercise and chronic diseases, a reviewer for 140+ journals, and a grant reviewer for private, national, federal, and foreign funding agencies. She has become a fellow of United States Bone and Joint Initiative in 2006, received a Texas Tech System Chancellor's Council Distinguished Research Award in 2011, and a fellow of NIH Clinical Research Management in 2016, and a fellow of Executive Leadership in Academic Medicine in 2019.

Judges AND Moderators

JUDGES

ORAL PRESENTATION

- Srikanth Mukkera, M.D.
- Selvan Vani, M.D.
- Michael Galloway, M.D.

POSTER PRESENTATION

- Nimat Alam, M.D.
- Cornelia De Riese, M.D.
- Sai Siva Mungara, M.D.
- Sarah Kiani, M.D.
- Elisa Brown, M.D.
- Suravajjala Devi, M.D.
- Vijay Eranki, M.D.
- Babatunde Jinadu, M.D.
- Tara Deaver, M.D.
- Vani Selvan, M.D.
- Christopher Maguire, D.O.
- Erik Wilkinson, M.L.S.

MODERATORS

ORAL PRESENTATION

- Asley Sanchez, B.S.
- Rebecca Brandenburg, MLIS
- Kushal Gandhi, Ph.D.

POSTER PRESENTATION

- Kushal Gandhi, Ph.D.
- Asley Sanchez, B.S.
- John Swearingen, MLIS
- Jammie Holland, LVN, CCRC
- Evangelina Santiago, LVN, CCRC
- Marissa Rodriguez

ORAL PRESENTATIONS

Oral Presentations

*(Underline: Presenting author; *: Corresponding author, #: Equally Contributing Author)*

1. **A Rare Case of Scleromyxedema in a Patient with Mgus**
   Joud Enabi*#, MD, Muhammad Waqar Sharif#, MD, Kyle McDaniel, MD, Arjan Singh, MD, Barath Rangaswamy, MD

2. **Isolated Ear Auricle Coccidiomycosis: A Rare and Challenging Diagnosis**
   Lutfor Nessa*, MD, MPH, Barath Rangaswamy, MD, Bosky Modi, MD, Devo Siravaijala, MD, Pablo Feuillet, MD

3. **Exploring the Link Between Gambling and Suicidal Thoughts in Individuals with Bipolar Disorder: An Analysis of National Inpatient Sample Dataset**
   Chintan Trivedi*, MD, MPH, Gaurav Chaudhari, MD, Kaushal Shah, MD, MPH, Mahwish Adnan, MD, Zeeshan Mansuri, MD, MPH, Shailesh Jain, MD, MPH, MEHP

4. ***Bright Ideas in Dark Spaces***
   Victoria Gerthe, DO, Michelle Grundstrom, MD, Ashley Lopez#*, DO, Serin Thomas#, MD, Christopher Maguire, DO

5. **Reducing Hospital CAUTI (Catheter-Associated Urinary Tract Infection) Rates – Quality Improvement Project in Infection Control**
   Lutfor Nessa1#, MD, MPH, Barath Rangaswamy#*, MD, Brianna Romero, Meredith E. Hulsey, DO, Pablo Feuillet, MD

6. **Apixaban Related Adrenal Hemorrhage and Primary Adrenal Insufficiency**
   Sailaja Saragadam#, MD, Barath Rangaswamy#*, MD, Pedro Rojas, MD, Jonathan Jarman, MS3, Li-Yieun Poy, MS3, Rahul Atodaria, MS3

7. **Bolus of Insulin versus No Bolus in the Treatment of Diabetic Ketoacidosis**
   Michele Bender, PharmD, Nathaniel Ehni*, PharmD, BCCCP, Laura Branum, PharmD, BCPS

8. **Applying the Business Model Canvas to Future Career Planning**
   Anosha Anwar#, MD, Joud Enabi#*, MD, Lutfor Nessa, MD , MPH, Sarah Kiani, MD, Alejandra Garcia, MD

Oral Presentations

*Underline: Presenting author; *: Corresponding author*

9. **Internal Hernia at Peterson Space with 720 Degree Rotationpersona**
   M. Canci#*, MD, M. Badiola#, MD, S. Vani, MD, N. Wolkenfeld, MD, D. Davenport, DO

10. **A Curious Case of Cutaneous Small Vessel Vasculitis**
    Rami Al-Ayyubi*, MD, Alejandro Herrera Ramos, MD, Divya Parepalli, MD, Pablo Eduardo Amador-Mejia, MD, Ahmad Hamdan, MD, Juan Guillermo Sierra David

11. **Training in Calling Consults: A Team Based Learning Workshop for Incoming Residents on Effective Inter-Professional Communication**
    Joud Enabi#*, MD, Anosha Anwar#, MD, Samhitha Gonuguntla, MD, Alejandra Garcia, MD, Sarah Kiani, MD

12. **Assessing the Frequency of Redosing Surfactants: A Retrospective Study**
    Alicia Chavez, PharmD, Ashley Bane*, PharmD, BCPS

13. **The Silent Danger: Uncovering the Link Between Hypothyroidism and Rhabdomyolysis**
    Pedro Rojas#*, MD, Lutfor Nessa#, MD, MPH, Vijay Eranki, MD, Barath Rangaswamy, MD, Devi Suravajjala, MD

14. **Double Trouble! A Case of Idiopathic Hypoparathyroidism and Fahr Syndrome**
    Dannel Diaz Ruiz*, MD, Vijay Eranki, MD, Swapna Kolli, MD, Lorianna Aleman Maymi

Oral Presentations

1. A Rare Case of Scleromyxedema in a Patient with Mgus

Joud Enabi[1#*], MD, Muhammad Waqar Sharif[1#], MD, Kyle McDaniel[1], MD, Arjan Singh[1], MD, Barath Rangaswamy[1], MD

[1]Department of Internal Medicine, Texas Tech University Health Sciences Center – Permian Basin, Odessa, TX, USA

BACKGROUND

Scleromyxedema is a rare medical condition clinically characterized by indurated erythematous papules disseminated on the face, chest, and extremities that coalesce and develop into plaques yielding extensive skin thickening. The diagnosis of scleromyxedema is established by correlating the histopathological findings and the patient's clinical presentation. In recent case reports, intravenous immunoglobulin (IVIG) is the first-line treatment option.

CASE DESCRIPTION

A 50-year-old female with a history of MGUS presented to an oncologist clinic from a dermatology referral for worsening pruritic acanthosis on her forearms and nose. Physical examination showed diffuse skin involvement of the forearm, nose, and bilateral legs. Skin biopsy showed fibroblastic proliferation in the superficial and deep dermis and dermal mucin deposition. Bone marrow biopsy showed normal marrow cellularity, and flow cytometry was suggestive of a small (0.03%) population of Kappa-restricted monoclonal plasma cells. Fluorescence in situ hybridization demonstrated 13q deletion and t (14;16) translation with a normal karyotype. Laboratory work-up prior to treatment was notable for albumin 3.3g/dL, globulin 4.5g/dL, and albumin/globulin ratio of 0.7. The patient was treated with cycles of IVIG therapy. Repeat laboratory testing after eight months of treatment showed albumin and globulin decreased to 3.1g/dL and 4.2g/dL, respectively, while the albumin/globulin ratio remained at 0.7. In addition, the patient reported improved facial skin lesions and resolution of the lesions on the proximal thighs.

CONCLUSION

Scleromyxedema is considered one of the rare chronic conditions of the Lichen myxedematosus family. The correlation between clinical manifestations and histological findings is crucial for diagnosing and treating patients

2. Isolated Ear Auricle Coccidiomycosis: A Rare and Challenging Diagnosis

Lutfor Nessa[1]*, MD, MPH, Barath Rangaswamy[2], MD, Bosky Modi1, MD, Devo Siravaijala[3], MD, Pablo Feuillet[4], MD

[1]*Resident Physician, Department of Internal Medicine, TTUHSC – Permian Basin, Odessa, Texas, USA*
[2]*Assistant Professor, Department of Internal Medicine, TTUHSC – Permian Basin, Odessa, Texas, USA*
[3]*Assistant Professor, Department of Endocrinology, TTUHSC – Permian Basin, Odessa, Texas, USA*
[4]*Infecitous Disease Specialist, Medical Center Hospital ProCare Infectious Disease, Odessa, Texas, USA*

BACKGROUND

Coccidioidomycosis is a fungal infection caused by inhalation of spores of Coccidioides immitis and Coccidioides posadasii found in desert soils in the southwestern US. It usually causes a self-limiting pulmonary infection, but in rare cases, it can progress to disseminated disease affecting bones, joints, meninges, and skin

CASE DESCRIPTION

A 58-year-old male with alcoholic liver cirrhosis presented with a right ear pinna infection that had started as a pimple and progressed to the whole ear over 2-3 months. Vitals were normal. Physical examination showed crusted ulcerations, abrasions, erythema, edema, and perichondrial thickening in right pinna, with normal clinical hearing. Despite treatment with antibiotics, antivirals, and antifungals, the patient's condition did not improve. Biopsy results showed mixed acute, chronic, and granulomatous inflammation with numerous fungal organisms consistent with Coccidioides spp. The patient was started on fluconazole, prednisone, and valacyclovir, but there was no relief. Infectious disease consultant started the patient on liposomal amphotericin B, followed by fluconazole after induction therapy. After 28 weeks of fluconazole treatment, the earlobe discoloration resolved with only slight induration remaining, and Coccidioides IgG levels decreased. The patient tolerated fluconazole well and was advised to continue treatment with close follow-up.

CONCLUSION

Isolated ear auricle coccidioidomycosis is rare and presents diagnostic and therapeutic challenges. Despite initial treatment with various medications, the patient's condition did not improve until the initiation of liposomal amphotericin B followed by fluconazole after induction therapy. This case underscores the importance of considering coccidioidomycosis as a differential diagnosis in patients with chronic ear infections, particularly in endemic areas.

3. Exploring the Link Between Gambling and Suicidal Thoughts in Individuals with Bipolar Disorder: An Analysis of National Inpatient Sample Dataset

Chintan Trivedi[1]*, MD, MPH, Gaurav Chaudhari[1], MD, Kaushal Shah[2], MD, MPH, Mahwish Adnan[1], MD, Zeeshan Mansuri[3], MD, MPH, Shailesh Jain[1], MD, MPH, MEHP

[1]*Department of Psychiatry, TTUHSC – Permian Basin, Midland, Texas*
[2]*Department of Psychiatry, Wake Forest Baptist Medical Center, Winston-Salem, North Carolina, USA*
[3]*Boston Children's Hospital/Harvard Medical School, Boston, Massachusetts*

BACKGROUND

Research has indicated that individuals with bipolar disorder (BD) have a higher likelihood of developing gambling disorders (GD). BD is associated with an increased risk of suicide; however, data is limited on the risk of suicidality among BD patients with comorbid GD.

MATERIALS AND METHODS

We utilized the National Inpatient Sample (NIS) from 2016-2018 to examine BD patients (with BD as the primary diagnosis) who had a secondary diagnosis of GD (BD+G). We also included a control group of BD patients without GD (BD-G), matched based on age and gender at a 1:4 ratio. We compared the groups for baseline and clinical characteristics, and suicidal thoughts. Furthermore, we conducted a multivariable logistic regression analysis to assess the relationship between 'GD' as a predictor and suicidal ideations as an outcome, while controlling for demographic and clinical variables.

RESULTS

We included BD with GD (n=765, Caucasian 83%) participants and BD without GD (n=3060) (mean age: 48, female: 56.9%, Caucasian 72%). The prevalence of alcohol abuse was higher in the BD+G group than in BD-GD (28.8% vs. 21.4%, p:0.05). However, the prevalence of substance use disorder was similar (59.5% vs. 59.3%, p: 0.97). Suicidal ideations were higher in the BD+GD group (42.5% vs. 34.0%, p:0.04). The risk remained marginally significant in the multivariable analysis (odds ratio: 1.42, 95% Confidence interval: 1.00-2.04, p:0.05).

CONCLUSION

As there is an increased risk of suicidal behavior and alcohol abuse among bipolar disorder patients with comorbid gambling disorders, clinicians should screen for gambling disorders in patients with bipolar disorder.

4. Bright Ideas in Dark Spaces

Victoria Gerthe[1], DO, Michelle Grundstrom[1], MD, Ashley Lopez[1#*], DO, Serin Thomas[1#], MD, Christopher Maguire[1], DO

[1]*Department of Obstetrics and Gynecology – TTUHSC – Permian Basin, Odessa, TX, USA*

BACKGROUND

Patients with foreign body insertions is not an uncommon presentation in the emergency department (ER). However, reports of patients with fragile objects such as a light bulb in the vagina are rare, especially in patients with complex psychosocial histories. There is a high risk of complications at time of removal due to lacerations and significant hemorrhage. Management strategies in such cases have not been well established in literature.

CASE DESCRIPTION

A female roughly mid-to-late 20s, G3P3003, presented to the ER for vaginal bleeding, possible rectovaginal fistula and known foreign body in vaginal cavity following escape from sexual traffickers. Radiologic imaging revealed a light bulb within the vaginal cavity, which was removed without complication in the operating room. Following the procedure, the patient left against medical advice (AMA). The patient presented to another hospital ER under a new alias and date of birth with a similar presentation. The foreign body, identified as another light bulb on imaging, was once again removed in the operating room in similar fashion. The patient once again left AMA prior to evaluation by psychiatry department.

CONCLUSION

Cases of self-harm in the setting of reported sexual assault are not uncommon in the literature, however this case was an uncommon presentation in both acuity (requiring surgical management) and dubious assault history. The patient likely had a component of mental illness with a possible remote sexual assault history which contributed to her unique presentation. Both women's health providers and psychiatry providers should be aware of cases such as these so they are prepared with resources when cases such as this arise.

5. Reducing Hospital CAUTI (Catheter-Associated Urinary Tract Infection) Rates – Quality Improvement Project in Infection Control

Lutfor Nessa[1#], MD, MPH, Barath Rangaswamy[1#*], MD, Brianna Romero[2], Meredith E. Hulsey[3], DO, Pablo Feuillet[4], MD

[1]Department of Internal Medicine – TTUHSC – Permian Basin, Odessa, Texas, USA
[2]Infection Control, Medical Center Hospital, Odessa, Texas, USA
[3]Chief Medical Officer, Medical Center Hospital, Odessa, Texas, USA
[4]Infecitous Disease Specialists, Medical Center Hospital, Odessa, Texas, USA

BACKGROUND

Catheter-associated urinary tract infection (CAUTI) is the fourth most common hospital-acquired infection causing significant morbidity and mortality with quality and financial consequences for health care entities. We describe a quality improvement project performed CY2020 -22 to reduce CAUTI rate at acute care hospital.

MATERIALS AND METHODS

CAUTI rate identified as 2.73 in CY 2020. Multi-pronged intervention based on Utilization, Insertion, Maintenance and Duration was implemented. UTILIZATION: Aimed at limiting foley catheter use overall. It includes: physicians and nursing education about appropriate indications, promotion of external device utilization (male condom catheter, female pure wics) reducing the amount of foleys without orders and nurse driven Foley removal protocol. Education on external devices was provided. INSERTION: Aseptic techniques for insertion and removal were promoted, nursing education for "foley champions" was provided. MAINTAINENCE: Includes: care of the foley catheter by daily review of Foley care bundle check offs, Peri Care education to nursing and aid staff, wipe trials and weekly Foley rounds by Infection Control team. DURATION: getting catheters out as soon as possible was stressed. Foleys were needed to be removed before day 3, indications verified, duration days information was pulled in to provider notes/ written on patient boards in rooms, chart reviews done by infection control, change out duration length was decreased from 30 days to 21 days.

RESULTS

CAUTI rate for CY 2021 was decreased to 1.96 from 2.73, further decreased to 0.55 during CY 2022.

CONCLUSION

The results describe the impact of the multi-pronged approach to reduce CAUTI rate.

6. Apixaban Related Adrenal Hemorrhage and Primary Adrenal Insufficiency

Sailaja Saragadam[1#], MD, Barath Rangaswamy[1#*], MD, Pedro Rojas[1], MD, Jonathan Jarman[2], MS[3], Li-Yieun Poy[2], MS[3], Rahul Atodaria[2], MS[3]

[1]Department of Internal Medicine, TTUHCS – Permian Basin, Odessa, Texas, USA
[1]School of Medicine, TTUHSC – Permian Basin, Odessa, Texas, USA

BACKGROUND

Adrenal hemorrhage (AH) after starting DOACs has been reported previously, but very rare. Clinical presentation is ambiguous and AH is often missed by clinicians.

CASE DESCRIPTION

48-year-old male with a history of HTN was started on apixaban for right femoral DVT. Four days later he presented to the ER with complaints of nausea, vomiting, RUQ abdominal pain. CECT Abdomen was reported to have right adrenal prominence/hyperplasia and right perinephric stranding. Cephalexin was prescribed. Ten days later he was admitted to ICU for altered mental status and seizures, generalized weakness, vomiting and watery diarrhea. He was hypotensive and tachycardic. Labs showed severe hyponatremia (103 mmol/L), hyperkalemia (6.3 mmol/L) with non-gap metabolic acidosis. He was treated with hypertonic saline, sodium bicarbonate drip and lokelma. Infectious work up was negative. Mental status improved. He was discharged home and completed three months of anticoagulation therapy. After few months he developed progressive fatigue, pedal edema, dyspnea and weight loss. Labs showed persistent mild hyperkalemia, hyponatremia and elevated creatinine. Cortisol level was low (1.4 ug/dl) with lack of incremental response to Cosyntropin. ACTH was high (> 2000 pg/ml). Repeat CT showed resolution of the strandy densities surrounding the adrenal gland and now showed discrete small nodule of 1.8 cm. Primary adrenal insufficiency following AH was suspected. Oral hydrocortisone with fludrocortisone was started. He improved markedly.

CONCLUSION

Given the increasing use of DOACs, clinicians should have a high index of suspicion for this rare adverse reaction. Early diagnosis and prompt steroids can avoid catastrophic adrenal crisis.

7. Bolus of Insulin versus No Bolus in the Treatment of Diabetic Ketoacidosis

Michele Bender[1], PharmD, Nathaniel Ehni[1]*, PharmD, BCCCP, Laura Branum[1], PharmD, BCPS

[1]*Department of Pharmacy, Medical Center Hospital, Odessa, Texas, USA*

BACKGROUND

Standard treatment for diabetic ketoacidosis (DKA) is fluid replacement and an insulin infusion. Based on the current American Diabetes Association guidelines, an insulin bolus prior to initiation of a continuous insulin infusion is optional.

MATERIALS AND METHODS

This was a retrospective chart review of adult patients presenting to Medical Center Hospital in 2021-2022 with a diagnosis of DKA who received an intravenous regular insulin infusion (0.1 unit/kg/hr). Patients who received a 0.1 unit/kg bolus prior to infusion were compared to those who did not receive a bolus. The primary endpoint was time to DKA resolution.

RESULTS

Preliminary results include 50 patients; of which only 14 received a bolus prior to infusion. DKA resolution was numerically, but not statistically, faster with bolus administration (12.7 hours vs 16.1 hours, p=0.43). Secondary endpoints included length of stay and adverse effects (hypoglycemia and hypokalemia); these also did not statistically differ between groups. 72% of patients had a hypokalemic event while receiving the insulin infusion, 75% of them did not have a maintenance fluid with potassium administered. Lastly, there was no difference in time to DKA resolution comparing those who received sodium bicarbonate versus those who did not.

CONCLUSION

Based on this study and current available literature, there does not seem to be a strong clinical benefit to administer an insulin bolus prior to a continuous insulin infusion for patients with DKA. This study also highlighted the importance of aggressive potassium replacement. Inclusion of more patients is intended to substantiate these results.

8. Applying the Business Model Canvas to Future Career Planning

Anosha Anwar[1#], MD, Joud Enabi[1#*], MD, Lutfor Nessa[1], MD, MPH, Sarah Kiani1, MD, Alejandra Garcia[1], MD

[1]Department of Internal Medicine, Texas Tech University Health Sciences Center – Permian Basin, Odessa, TX, USA

BACKGROUND

The Business Model Canvas (BMC) is a well-established framework for strategic planning in entrepreneurship, developed in 2005 by Osterwalder. We used the BMC to coach PGY-2 internal medicine (IM) residents at Texas Tech University Health Sciences Center-Permian Basin (TTUHSC-PB) in developing their professional development strategic plans, recognizing that each International Medical Graduate (IMG) is like a start-up in a competitive space.

MATERIALS AND METHODS

We conducted a 3-hour team-based learning workshop for PGY-2 IM residents at TTTUHSC-PB to evaluate their awareness of career plans. Pre- and post-intervention surveys were used to assess residents' awareness of their individualized career plans, confidence in their goals, and the effectiveness of using TTUHSC-PB resources. The BMC format was introduced to outline future goals and receive feedback. A post-workshop survey was conducted to assess resident comfort and confidence in career planning.

RESULTS

Residents at TTUHSC-PB are confident in their career goals but are not very familiar with the available resources to support their career plan execution. However, after attending the workshop, residents felt more aware of the resources and will use these resources effectively in the future. In addition, the workshop received high ratings for its quality, relevance, venue, and timing, and participants enjoyed the event without suggesting any areas of improvement for future workshops.

CONCLUSION

The BMC framework was used to coach PGY-2 internal medicine residents at TTUHSC-PB in developing strategic professional development plans. The workshop increased awareness of available resources and improved confidence in using them to execute their career plans effectively.

9. Internal Hernia at Peterson Space with 720 Degree Rotation

M. Canci[1#*], MD, M. Badiola[1#], MD, S. Vani[1], MD, N. Wolkenfeld[2], MD, D. Davenport[2], DO

[1]*Department of Family and Community Medicine, TTUHSC – Permian Basin, Odessa, Texas, USA*
[2]*Department of Surgery, TTUHSC – Permian Basin, Odessa, Texas, USA*

BACKGROUND

Differential diagnosis of cutaneous small-vessel vasculitis (CSVV) is a challenging clinical endeavor. Most patients present with symmetrically distributed palpable purpura on the lower extremities. A clinician must consider autoimmune connective tissue diseases (15-20%), drug sensitivity (10-15%) and lymphoproliferative disorders or malignancies (5%).

CASE DESCRIPTION

A 45-year-old patient with a history of polysubstance abuse was admitted with complaints of a painful rash on the lower extremities. Labs showed MRSA bacteremia. Patient was found to be hepatitis C positive, atypical p-ANCA positive, and negative for cryoglobulin. Complements C3 and C4 were normal. Transthoracic echocardiography showed large tricuspid valve vegetations. Broad-spectrum antibiotic therapy was initiated, and patient's response to treatment was evident on 3rd day. Cutaneous lesions and rash resolved completely in 2 weeks.

CONCLUSION

Cutaneous small-vessel vasculitis is a challenging disease with various possible differential diagnoses. A rare cause of cutaneous vasculitis is levamisole toxicity. The mechanism of levamisole-induced vasculitis is unknown. Levamisole and cocaine induce the release of neutrophil extracellular traps (NET)-associated neutrophil elastase, a known ANCA antigen in cocaine users that causes local inflammation and endothelial damage in small vessels. Another important cause of cutaneous peripheral purpura is cryoglobulinemia. It is a systemic inflammatory condition that develops due to the deposition of cryoglobulin-containing immune complexes in the small and medium vessels. On the other end of the spectrum purpura fulminans is rare cause of cutaneous vasculitis in the setting of MRSA. This case emphasizes the importance of considering different clinical scenarios on the differential diagnosis that clinically manifests as palpable lower extremity purpura.

10. A Curious Case of Cutaneous Small Vessel Vasculitis

Rami Al-Ayyubi[1]*, MD, Alejandro Herrera Ramos1, MD, Divya Parepalli[1], MD, Pablo Eduardo Amador-Mejia[2,3], MD, Ahmad Hamdan[1], MD, Juan Guillermo Sierra David[2]

[1]Department of Internal Medicine, TTUHSC – Permian Basin, Odessa, Texas, USA
[2]Department of Internal Medicine, Medical Center Hospital, Odessa, Texas, USA
[3]Department of Internal Medicine, Midland Memorial Hospital, Midland, Texas, USA

BACKGROUND

Differential diagnosis of cutaneous small-vessel vasculitis (CSVV) is a challenging clinical endeavor. Most patients present with symmetrically distributed palpable purpura on the lower extremities. A clinician must consider autoimmune connective tissue diseases (15-20%), drug sensitivity (10-15%) and lymphoproliferative disorders or malignancies (5%).

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11. Training in Calling Consults: A Team Based Learning Workshop for Incoming Residents on Effective Inter-Professional Communication

Joud Enabi[1#*], MD, Anosha Anwar[1#], MD, Samhitha Gonuguntla[1], MD, Alejandra Garcia[1], MD, Sarah Kiani[1], MD

[1]*Texas Tech University Health Sciences Center – Permian Basin, Odessa, TX, USA*

BACKGROUND

Effective communication is essential for providing information to other physicians, making a proper diagnosis, and delivering safe healthcare. Standardizing the information communicated during consultations can improve the quality of consults and, as a result, improve patient care.

MATERIALS AND METHODS

A team-based learning workshop was conducted to introduce CONSULT tool to incoming residents at TTUHSC-PB Program. The workshop evaluated the residents' awareness of barriers to clear inter-professional communication by having them fill out a survey before and after the intervention. “CONSULT tool" format was introduced to the residents during a 3-hour workshop, where residents engaged in role-playing simulations using the CONSULT acronym. The residents' comfort and confidence in the consultation process were assessed afterward with another online survey.

RESULTS

Forty internal medicine residents attended the workshop, and seventeen participants filled out the surveys (42.5% of total trainees invited).63.2% of residents had called consultations as medical students during their clerkships. However, only 10% received training on calling consults before starting residency. The ratio of residents who responded as very comfortable and somewhat comfortable when calling consults increased from 57.9% to 100%. The majority of the trainees believed that they had developed greater confidence and developed a more systematic approach to calling consults using the CONSULT model after attending the workshop.100% of the participants agreed that improving communication skills when calling consults can result in better interpersonal relationships among physicians, higher job satisfaction rates, and fewer medical errors.

CONCLUSION

Structured training for incoming residents on the fundamentals of effective communication using CONSULT tool format improved resident confidence and communication skills.

12. Assessing the Frequency of Redosing Surfactants: A Retrospective Study

Alicia Chavez[1], PharmD, Ashley Bane[1]*, PharmD, BCPS

[1]*Medical Center Health Hospital Pharmacy Department, Odessa, Texas Tech University Health Sciences Center*

BACKGROUND

Surfactants have been used in the setting of respiratory distress syndrome for several years. The objective of this study was to assess the rate of redosing for two different surfactants, Survanta and Curosurf, that have been administered in the Level 3 NICU at Medical Center Health (MCH).

MATERIALS AND METHODS

Retrospective chart review of inborn infants at Medical Center Health. The rate of redosing, presence in the NICU at 36 weeks, incidence of extubation at 72 hours, oxygen requirements at 36 weeks, and instance of pulmonary hemorrhage were recorded.

RESULTS

A total of 144 infants were included in the study, 72 received Survanta and 72 received Curosurf. The rate of redosing was higher in the Curosurf group ($X2(1, n=144) =10.71$, $p= 0.001$), but there was no difference in terms of admittance to the NICU after 36 weeks post menstrual age (PMA), rates of extubation at 72hrs post surfactant administration, and oxygen requirements at 36 weeks PMA. There was also no difference when it came to mortality and incidence of pulmonary hemorrhage.

CONCLUSION

This retrospective review suggests that the initial larger dose of Curosurf does not lead to a lower incidence of redosing when compared to Survanta and there was no difference in either safety or secondary outcomes. Further investigation is required to make a recommendation on continued use of the current surfactant at MCH.

13. The Silent Danger: Uncovering the Link Between Hypothyroidism and Rhabdomyolysis

Pedro Rojas[1#*], MD, Lutfor Nessa[1#], MD, MPH, Vijay Eranki[2], MD, Barath Rangaswamy[1], MD, Devi Suravajjala[2], MD

[1]*Department of Internal Medicine, Texas Tech University Health Sciences Center – Permian Basin, TX, USA*
[2]*Department of Endocrinology, Texas Tech University Health Sciences Center – Permian Basin, Odessa, TX, USA*

BACKGROUND

Slight elevation of creatinine kinase can be seen with hypothyroidism. Rarely, hypothyroidism can lead to rhabdomyolysis. The mechanism of rhabdomyolysis in hypothyroidism is not clear but may be from impaired muscle tissue metabolism. We report a unique case of uncontrolled primary hypothyroidism and rhabdomyolysis with no known precipitating factors.

CASE DESCRIPTION

A 37-year-old Hispanic female with primary hypothyroidism and multiple Levothyroxine (LT4) dose changes in the past presented to the ER with extreme fatigue, severe muscle aches, lower limb weakness, polyuria, and polydipsia. Labs showed TSH of 243 uIU/mL (0.5-5), Free T4 <0.11 ng/dL (0.9-2.3), CK 5191 U/L (30-145), myoglobin 401 ng/mL (25-72), creatinine 1.35 mg/dL (0.59-1.04). Pituitary MRI showed a 6 mm pituitary adenoma. Except for elevated TSH, biochemical testing of anterior pituitary function was normal. Despite questionable adherence, the patient reported taking LT4 100 mcg daily. Patient received one dose of IV LT4 200 mcg with aggressive hydration. Patient symptoms alleviated after 48 hours and was discharged home on LT4 200 mcg daily. On follow up in 2 weeks, she was clinically euthyroid with no additional concerns. Repeat TFTs are pending.

CONCLUSION

Rhabdomyolysis from hypothyroidism is due to inhibition of mitochondrial activity in muscle cells including dysregulated metabolic pathways as Krebs cycle, fatty acid catabolism, and glycolytic energy production. Clinicians should remain vigilant for this rare yet life-threatening complication of uncontrolled hypothyroidism. Also, in this case pituitary hyperplasia secondary to the lack of negative feedback on the pituitary and hypothalamus could probably be mistaken for a pituitary adenoma.

14. Double Trouble! A Case of Idiopathic Hypoparathyroidism and Fahr Syndrome

Dannel Diaz Ruiz[1]*, MD, Vijay Eranki[1], MD, Swapna Kolli[1], MD, Lorianna Aleman Maymi[1], MD, James Case[1], MD

[1]*Department of Endocrinology, Texas Tech University Health Sciences Center – Permian Basin, Odessa, TX, USA*

BACKGROUND

Primary hypoparathyroidism causes hypocalcemia due to low parathyroid hormone (PTH). Etiologies include autoimmune disorders, altered regulation or impaired activity of PTH and abnormal parathyroid gland development.

Brain calcifications can be found with hypocalcemia. Fahr syndrome is characterized by calcium deposition in the brain including basal ganglia, dentate nuclei and cerebral cortex. Our patient had idiopathic hypoparathyroidism with intracranial calcifications: Fahr syndrome.

CASE DESCRIPTION

A 37-year-old patient with history of hypocalcemia, bipolar disorder, focal seizures, and drug use was admitted with focal seizure, perioral numbness, and paresthesias. There was no family history of parathyroid or calcium/endocrine disorders and immunodeficiencies. The patient had no history of neck surgery or head trauma. Labs showed ionized calcium 0.67mmol/L (1.12-1.32), phosphate 5.5mg/dl (2.5-4.5mg/dl), PTH 4.8 pg/ml (15-65pg/ml), morning cortisol 7.8 mcg/dl and 24 urine calcium 400mg/24h. EKG demonstrated QT prolongation. Head CT and brain MRI demonstrated basal ganglia, thalami, and cerebellar dentate nuclei calcifications consistent with Fahr disease. The patient was admitted and treated with IV calcium gluconate and calcitriol, which improved symptoms. IV calcium was switched to oral calcium carbonate replacement. At the end of the hospitalization, improvement in neuromuscular symptoms and ionized calcium was noted. The etiology of hypoparathyroidism was possibly idiopathic primary hypoparathyroidism.

CONCLUSION

There is not much data on the incidence and prevalence of Fahr syndrome. Some authors suggest a very low prevalence (<1 per million population). Idiopathic hypoparathyroidism and secondary Fahr syndrome are rare, and it is essential to understand and identify such conditions to assist in the early diagnosis and treatment.

POSTER PRESENTATIONS

Poster Presentations

*(Underline: Presenting author; *: Corresponding author, #: Equally Contributing Author)*

1. **Quality Improvement Initiative – The Impact of Pharmacy-Driven Protocol on Appropriate Utilization of Epoetin in Hospitalized Chronic Kidney Disease Patients on Dialysis**
   Charlie Cid, PharmD, Barath Rangaswamy, MD, Mina Aziz*, RPh, PhD

2. **An Unusual Cause of Headache: Hypertrophic Pachymeningitis**
   Muhammad Waqar Sharif#, MD, Joud Enabi*#, MD, Raksha Venkatesan, MD, Maida Faheem, MD, Hema Kondakindi, MD

3. **Examining the Effects of Serotonin Reuptake Inhibitors on Body Weight in Patients with Anxiety and Mood Disorders: A Comprehensive Meta-Analysis of Randomized Clinical Trials**
   Chintan Trivedi*, MD, MPH, Karrar Husain, MD, Muhammad Saad, MD, Mudsara Hassan, MD, Zeeshan Mansuri, MD, Barath Rangaswamy, MD, Shailesh Jain, MD, MPH, MEHP

4. **A Case of Lactic Acidosis Secondary to Beriberi**
   Rahul Atodaria*#, MS3, Karthik Chamarti#, MD, Barath Rangaswamy, MD, Pranav Ganta, MD, Sudhir Bare, MD, Anand Reddy, MD

5. **Neurosyphilis and Bilateral Facial Palsy – Raising the Index of Suspicion**
   Bosky Modi#*, MD, Barath Rangaswamy, MD, Lutfor Nessa#, MD, MPH, Raghavendra Sanivarapu, MD, Pablo Feuillet, MD

6. **Isolated Bone Marrow Sarcoidosis: An Elusive Extrapulmonary Manifestation**
   Kejal Shah#, MD, Hema Kondakindi#, MD, Joud Enabu, MD, Srikanth Mukkera, MD, Sudhir Bare, MD, Barath Rangaswamy, MD, Anand Reddy*, MD

7. **Amantadine and Donepezil for Post-Acute Hypoxic Encephalopathy**
   Triet Le, MS3, Duc Le, MS3, Mark Frederickson*, MD, Bei Zhang, MD, John Norbury, MD

8. **Symmetrical Peripheral Gangrene in the Setting of Chronic Kidney Disease, Sepsis, and Late Presentation: A Case Report**
   Divya Parepalli, MD, Patrice Lamey*, MS3, Sai Siva J. Mungara, MD, Barath Rangaswamy, MD

9. **Are Hospital Staff Employed in the Department of Gastroenterology at Higher Risk of Infection with Helicobacter pylori?**
   Musthafa C Peedikayil#, Adnan Almahrouq, Sharon Premlall, Sharis Ismail, Fahad AlSohaibani, Joud M. Kossai Enabi1*#, MD, Hamza M. Kossai Enabi, Alwalid M Hejazi

Poster Presentations

*(Underline: Presenting author; *: Corresponding author, #: Equally Contributing Author)*

10. **Atypical Presentation of GIST Spindle Cell Tumor Located in the Rectum as Bowel Perforation – A Case Report**
M Canci*, MD, Dr. Selvan Vani, MD, Dr. Donald Davenport, MD

11. **Viloxazine Associated Partial Priapism in Children, Case Report**
Wisam Al Jumaili*, MD, Shailesh Jain, MD, MPH, MEHP

12. **Infective Endocarditis Caused by Neisseria elongata on a Native Mitral Valve**
Laura Gonzales#, MD, Alejandro Herrera*#, MD, Rami Al-Ayyubi, MD, Pablo Feuillet, MD

13. **Multiple Hospitalizations due to electrolyte imbalance! What are we missing?**
Pedro Rojas*, MD, Vijay Eranki, MD, Dannel Diaz, MD, Barath Rangaswamy, MD

14. **Depression and anxiety - Diagnosis and management in primary care: A review**
Roy Sebastian*#, MD, Abasiodu Umoh#, MD, Vani Selvan, MD

15. **Generic or Brand Name Entresto?**
Joud Enabi#*, MD, Prince Ernest#, MD, Mohammad Qudrat Ullah, MD, Anosha Anwar, MD, Barath Rangaswamy, MD

16. **Quality Improvement Project to Reduce 30 Day Hospital Readmission Rates in heart Failure and CABG Patients**
Muhammad Waqar Sharif#*, MD, Barath Rangaswamy#, MD, Kayla Bairrington, RN Meredith E. Hulsey, DO

17. **Evaluation of Anti-Xa Level Monitoring of Enoxaparin for Thromboprophylaxis in High-Risk Patients**
Thao-Mi Vu, PharmD*, Thu Thao Do, PharmD, Kristina Chang, PharmD, BCPS, Barath Rangaswamy, MD

18. **Two-year Follow Up of Anomalous Coronary Artery from The Opposite Sinus with Interarterial Course**
Alejandro Herrera*, MD, Pablo Amador Mejia, MD, Rami Al-Ayyubi, MD, Joud Enabi, MD, Laura Gonzales, MD, Francisco J. Somoza-Cano, MD, Michele P. Sartori, MD

Poster Presentations

*(Underline: Presenting author; *: Corresponding author, #: Equally Contributing Author)*

19. **PRSS1-related hereditary pancreatitis**
Roy Sebastian#*, MD, Abasiodu Umoh#, MD, Vani Selvan, MD

20. **Perineal White Piedra in a Central American Immigrant: A Case Report and Literature Review**
Dakota Tolleson, MS3, Asley Sanchez, BS, Gary Ventolini*, MD, FACOG, FAAFP, Kushal Gandhi, PhD, John Garza, PhD

21. **Reducing Hospital Length of Stay (LOS) Metric – Quality Improvement in Utilization Management**
Joud Enabi#, MD, Barath Rangaswamy#*, MD, Karime Ramirez, BSN, RN, Meredith E. Hulsey, DO

22. **Shrinking Syndrome: A Rare Pulmonary Complication of Systemic Lupus Erythematosus**
Kejal Shah*, MD, Samhitha Gonuguntla, MD, Hema Kondakindi, MD, Joud Enabi, MD, Barath Rangaswamy, MD, Srikanth Mukkera, MD

23. **CABG Complicated by Hemorrhagic Shock in Patient Taking SAW PALMETTO**
Rami Al-ayyubi*, MD, Laura Gonzales Reyes, MD, Joud Enabi, MD, Jehangir Malik, MD, Muhammad Qudrat Ullah, MD, Alejandro Jose Herrera Ramos, MD, Catalasan Gerardo, MD, Awtrey Stanton, MD

24. **Giant Cervical Polyp Causing Breakthrough Bleeding After Beginning Estrogen Based Oral Contraceptives**
Kristina Cross#, MS, Dakota Tolleson#, BS, Ashley Sanchez, BS, Gary Ventolini*, MD, FACOG, FAAFP

25. **Use of Avacopan in Antineutrophil Cytoplasmic Antibody – Associated Vasculitis with Diffuse Alveolar Hemorrhage**
Hema Kondakindi, MD, Kejal Shah, MD, Duy Chung, MBBS, Luan Ngo, MBBS, Srikanth Mukkera, MD, Barath Rangaswamy, MD, Alejandra Garcia Fernandez*, MD

26. **Medical Education Innovation Initiative – Improving Radiology Curriculum by Reading Room Radiology Rounds**
Barath Rangaswamy#*, MD, Srikanth Mukkera, MD, Vishaal Kondoor#, MS3, Karim Sulaiman, MS3, Duc Le, MS3, George Rodenko, MD, Stephanie Stroever, PhD

Poster Presentations

*(Underline: Presenting author; *: Corresponding author, #: Equally Contributing Author)*

27. **Splenic Abscess of Unknown Etiology with Atraumatic Spontaneous Splenic Rupture**
Vidya Bharati Sinha#*, MD, Sania Dhanani#, MD, Vani Selvan, MD

28. **Comparison of Biofilm Growth and Quorum Sensing Molecules in Vaginal Lactobacillus Species**
Duc Le[1], BS, Asley Sanchez[1], BS, Kushal Gandhi[1], PhD, Fnu Alimiran[2], MS, Samuel David[3], PhD, Christopher B. Babayco[3], PhD, Triet Le[1], BS, John Garza[4], PhD, Gary Ventolini[1]*, MD, FACOG, FAAFP

29. **You Are What You Eat: Quality of Diet and Its Impact on Mental Health**
Darshini Vora#*, MD, Chintan Trivedi#, MD, MPH, Aiswarya Nandakuma, MD, Mudasar Hassan, MD, Yashar Yousefzadeh Fard, MD, Mixngxu Zhang, MD, Shailesh, Jain, MD, MPH, MPEH

30. **Respiratory failure associated with autoimmune myositis of the diaphragm in Primary biliary cirrhosis**
Roy Sebastian#*, MD, Dan Le#, MS3, Vani Selvan, MD

31. **Evaluating Premature Myocardial Infarction Related Mortality Rate in US-Mexico Border Underserved Area**
Muhammad Waqar Sharif#, MD, Sulaiman Karim, MS3, Katrina Llorente, MS3, Vishaal Kondoor, MS3, Mayra Gomez, MS3, Barath Rangaswamy#*, MD, Stephanie Stroever, PhD

32. **MIND THE GAP or DON'T? - Pseudo Acidosis in a patient with Hypertriglyceridemia**
Lutfor Nessa#, MD, MPH, Joud Enabi#, MD, Devi Suravajjala, MD, Barath Rangaswamy, MD, Vijay Eranki*, MD

33. **Vulvar Xanthomas in a Patient with Familial Hypercholesterolemia**
Annie Gilliam#, DO, Robert Eke#, MD, Gary Ventolini*, MD, FACOG, FAAFP

34. **A Rare Case of Spontaneous Renal Hematoma**
Rahul Atodaria#*, MS3, Lutfor Nessa#, MD, MPH, Genesis Perez Del Nogal, MD, Barath Rangaswamy, MD, Sai Siva Mungara, MD

Poster Presentations

*(Underline: Presenting author; *: Corresponding author, #: Equally Contributing Author)*

35. **Cogan's Syndrome in the Rare Setting of Sjorgen's Syndrome**
Kejal Shah, MD, Hema Kondakindi, MD, Kristina Cross, MS3, Aimen Asim Dar, MD, Srikanth Mukkera*, MD

36. **Is Saffron Effective in the Management of ADHD?**
Mahwish Adnan*, MD, Muhammad Saad, MD, Chintan Trivedi, MD, Bobby Jain, MD

37. **Improving Appropriate Gastrointestinal Prophylaxis in Hospitalized Patients on High Doses of Glucocorticoids at Medical Center Hospital in Odessa, TX**
Alejandro Herrera*, MD, Genesis Perez Del Nogal, MD, Laura Gonzalez, MD, Pablo Amador Mejia, MD, Muhammad Waqar Sharif, MD, Ashley Bane, PharmD, BCPS, Claudia Kelso, MD, MPH, Sarah Kiani, MBBS, APD

38. **Preventive Effect of Natural Light Exposure on Depressed Mood: A Hope for Bipolar Depressive Patients**
Manwish Adnan*, MD, Chintan Trivedi, MD, MPH, Zeeshan Mansuri, MD, MPH, Shailesh, Jain, MD, MPH, MEPH

39. **Polyarteritis Nodosa Presenting with Spontaneous Splenic Artery Aneurysmal Rupture**
Hema Kondakindi, MD, Kejal Shah, MD, Joud Enabi, MD, Maneesh Mannem, MD, Srikanth Mukkera*, MD

40. **Gitelman Syndrome**
Joud Enabi#*, MD, Lutfor Nessa#, MD, Arjan Singh, MD, Muhammad Waqar Sharif, MD, Barath Rangaswamy, MD, Mamoun Bashir, MD

41. **An Incidental Finding of Recurrent Colorectal Cancer in a Multiple Endocrine Cancer Survivor**
Bolanle Bolaji, MD, MPH, Rahul Atodaria, MS3, Nimat Alam*, MD

42. **Pulmonary Embolism Due to Iron Deficiency Anemia in a Young Patient**
Bosky Modi#, MD, Laura Gonzales-Reyes*#, MD, Sai Siva Mungara, MD, Barath Rangaswamy, MD

Poster Presentations

*(Underline: Presenting author; *: Corresponding author, #: Equally Contributing Author)*

43. **T10 Class A Ventral Spinal Epidural Hematoma in the Setting of Hypertensive Emergency**
Triet Le, MS3, Duc Le, MS3, Mark Frederickson*, MD, Bei Zhang, MD, John Norbury, MD

44. **Management of a Large Intraluminal Thrombus in an Aneurysmal Coronary Segment with Normal Coronary Flow**
Alejandro Herrera*, MD, Laura Gonzales, MD, Carlos Felipe Matute Martinez, MD, Juan Fernando Toledo Martinez, MD, and Allan Beall, MD

45. **Opsoclonus-Myoclonus Syndrome in a Patient with West Nile Virus Neuroinvasive Disease (WNND)**
Ali Hamza Khair, MD, Muhammad Waqar Sharif, MD, Joud Enabi, MD, Arjan Singh*, MD, Maida Faheem, MD, Alejandra Garcia Fernandez, MD, Barath Rangaswamy, MD

46. **Comparison Between Accelerate Pheno and Microscan for the Determination of the Impact of Rapid Pathogen Identification and Sensitivity in Bacteremia**
Brandon Buss, PharmD, Alexander Rothenberger*, PharmD, BCPS

47. **Contextualizing the Relationship Between Social Isolation and Substance Abuse**
Chintan Trivedi, MD, MPH, Abid Rizvi, MD, Rupak Desai, MD, Zeeshan Mansuri, MD, MPH, Shailesh Jain*, MD, Sulaiman Karim, BS, Jasmin Freeborn, BS

48. **Improving Smoking History Documentation in the Electronic Medical Record At Our Primary Care Clinic: A Clinical Workflow Quality Improvement Project**
Sailaja Devi Saragadam, MD, Sai Siva Mungara*, MD

49. **Low-Risk Pregnancies versus High-Risk Pregnancies in a West Texas Academic Clinic**
Cornelia de Riese*, MD PhD MBA, Jasmin Freeborn, MS3, Asley Sanchez, BS, Kushal Gandhi, PhD

50. **Cytokine Profiles and Their Roles in Development of Provoked Vulvodynia: A Pilot Study**
Triet Le#, BS, Duc Le#, BS, Asley Sanchez, BS, Kushal Gandhi, PhD, John Garza, PhD, Gary Ventolini*, MD, FACOG, FAAFP

Poster Presentations

*(Underline: Presenting author; *: Corresponding author, #: Equally Contributing Author)*

51. **A Case of Idiopathic Intracranial Hypertension in Pregnancy**
Taelah Wooten*, DO

52. **Isolated Tubal Torsion in Adolescent Female: A Case Report**
Maricela E. Chavez, MD, MS, Kathryn Hutton*, DO

53. **Durvalumab Induced Vasculitis in a Patient with Gall Bladder Carcinoma**
Shreya Uppala, BS, Divya Parepalli*, MD, Manny Mangat, MD, Barath Rangaswamy, MD

54. **Case Report: Dermatologic Complications of COVID-19 Infection**
Shakira Meltan*, MS-3, Nimat Alam, MD

55. **Medical Education Innovation Initiative – Improving Student SHELF Scores by Longitudinal Plan**
Barath Rangaswamy#*, MD, Srikanth Mukkera, MD, Patrice S. Lamey#, MS3, Shakira Meltan, MS3, Stephanie Stroever, PhD

56. **Comparing Outcomes of 7 Days or Less vs. Over 7 Days of Antibiotic: Therapy on Hospital Acquired Pneumonia**
Miguel Rivera, PharmD, Adewale Balogun, PharmD, Cheryl Go, PharmD, Barath Rangaswamy, MD, Nimat Alam, MD

57. **Delayed Presentation of Osmotic Demyelination Syndrome Treated with Plasmapheresis**
Arjan Singh#, MD, Roman Karkee#, MD, Raksha Venkatesan, MD, Muhammad Waqar Sharif, MD, Joud Enabi, MD, Barath Rangaswamy, Raghavendra Sanivarapu*, MD, MD, Maida Faheem, MD

58. **Posterior Reversible Encephalopathy Syndrome in the Background of a Patient with Lupus Nephritis on Mycophenolate Mofetil**
Hema Kondakindi, MD, Kejal Shah, MD, Joud Enabi, MD, Barath Rangaswamy, MD, Srikanth Mukkera, MD, Asif Ansari*, MD

59. **Mental Health in the Elderly: A Study of Octogenarians with Psychiatric Disorders in Inpatient Hospitals**
Chintan Trivedi*, MD, Kaushal Shah, MD, Muhammad Saad, MD, Karrar Husain, MD, Darshini Vora, MD, Zeeshan Mansuri, MD, Shailesh Jain, MD, MPH, MEHP

Poster Presentations

*(Underline: Presenting author; *: Corresponding author, #: Equally Contributing Author)*

60. **The Power of Search Trends: Examining National Suicide Prevention Week Awareness**
Chintan Trivedi*, MD, MPH, Shakira Meltan, BS, Timothy Chao, MD, Darshini Vora, MD, Shailesh Jain, MD, MPH, MEHP

61. **Migration of a Contraceptive Sub-Dermal Device into the Lung**
Joud Enabi*, MD, Alejandro J. Herrera-Ramos, MD, Rami Al-Ayyubi, MD, Pablo Amador Mejia, MD, Deepika Devalla, MD

62. **Late Onset Neonatal Sepsis**
Roy Sebastian#*, MD, Vani Selvan#, MD

63. **Streptococcus Anginosus Lung Abscess with Complicated Parapneumonic Empyema**
Laura Gonzalez, MD, Luftor Nessa*, MD, Raghavendra Sanivarapu, MD, Barath Rangaswamy, MD, FACP

64. **If there is One, There are Two: A Case of Addison's Disease Presenting as an Adrenal Crisis in a Patient with Autoimmune Primary Ovary Insufficiency**
Pedro Rojas*, MD, Devi Suravajjala, MD, Barath Rangaswamy, MD

65. **Incidental Finding of Extra-Ovarian Granulosa Cell Tumor during Hysterectomy**
Sabrina Leung#, MD, Traci Bartkus#*, DO, Michael Galloway, DO

66. **Moyamoya Disease presents with stroke symptoms and new-onset headache**
Roy Sebastian#*, MD, Imran Ahmed#, MD, Vani Selvan, MD

67. **An Isolated Saddle Nose Deformity in Patient with Granulomatosis with Polyangiitis (GPA)**
Joud Enabi#*, MD, Samhitha Gonuguntla, MD, Muhammad Waqar Sharif#, MD, Kejal Shah, MD, Bosky Modi, MD, Barath Rangaswamy, MD

68. **Positive Impact of Dedicated Half-day Clinic on Ambulatory Care Residency Training**
Roman Karkee#*, MD, Hassan Khalid, MD, Genesis Perez Del Nogal#, MD, Sarah Kiani#, MD, Arjan Singh, MD, Casie Reyes, BSBA

Poster Presentations

*(Underline: Presenting author; *: Corresponding author, #: Equally Contributing Author)*

69. **A Mysterious Case of Cavitary Lung Lesion in a Healthy Young Male**
Lutfor Nessa#, MD, MPH, Kristina Cross#, MS3, Sai Siva Mungara, MD, Barath Rangaswamy*, MD

70. **Mental Health and Healthcare Utilization Among Adolescents with Gender Identity Disorder: A National Study**
Kodi, P.[1]*, MD, Nallu, P.[1], MD, Wisam, A.[1], MD, Shah, K.[2], MD, Desai, R.[1], MD, Zeeshan, M.[3], MD, Jain, S.[1], MD, MPH, MEHP

71. **Metastatic Papillary Serous Endometrial Adenocarcinoma Presenting as Tubo-Ovarian Abscess**
Sabrina Leung#, MD, Crissie Gale#*, MD, Glen Bennion, MD

72. **Renal Sarcoidosis Causing Acute Renal Failure – An Unusual Form of Presentation of Sarcoidosis in a Young Adult**
Roman Karkee*, MD, Arjan Singh, MD, Barath Rangaswamy, MD, Anand Reddy, MD

73. **The Lethal Allure of Asphyxiophilia: An Under-recognized Cause of Pneumocephalus and Death**
Lutfor Nessa*#, MD, MPH, Genesis Perez Del Nogal#, MD, Joud Enabi, MD, Alejandra Garcia Fernandez, MD

74. **Post-Myocardial Infarction Pseudoaneurysm Complicated with Free Wall Rupture**
Muhammad Waqar Sharif#, MD, Joud Enabi#*, MD, Maida Faheem, MD, Alejandro J. Herrera-Ramos, MD, Kejal Shah, MD

75. **An Incidental Finding of Renal Cell Carcinoma Compressing on IVC in a Patient Presenting with Atrial Fibrillation with Rapid Ventricular Response**
Stephanie Rodriguez#*, PGY2, SivaTeja Pati*#, MS4, Nimat Alam, MD

76. **Double Trouble: Uterine Didelphys**
Ashley Lopez#, DO, Suna Burghul#, DO, David Moore*, MD

77. **Rituximab for Libman-Sacks Endocarditis**
Samhitha Gonuguntla*, MD, Andres Mata, MD, Bosky Modi, MD, Barath Rangaswamy, MD Srikanth Mukkera, MD, Kejal Shah, MD

1. Quality improvement Initiative – The Impact of Pharmacy-Driven Protocol on Appropriate Utilization of Epoetin in Hospitalized Chronic Kidney Disease Patients on Dialysis

Charlie Cid[1], PharmD, Barath Rangaswamy[2], MD, Mina Aziz[1]*, RPh, PhD

[1]*Department of Pharmacy, Medical Center Hospital, Odessa, Texas, USA*
[2]*Department of Internal Medicine, TTUHSC – Permian Basin, Odessa, Texas, USA*

BACKGROUND

Epoetin alpha is an erythropoiesis-stimulating agent (ESA) indicated for the treatment of anemia in CKD patients on dialysis. The Kidney Disease Improving Global Outcomes (KDIGO) guidelines recommend determining the initial dose using the patient's hemoglobin concentration, body weight, and clinical circumstances. A new epoetin administration and iron replacement protocol has been recently implemented at Medical Center Hospital (MCH) to standardize dosing and monitoring of patients receiving epoetin. This study assessed the impact and outcomes associated with the implementation of the new protocol.

MATERIALS AND METHODS

Dialysis patients who were admitted to MCH between July 1st, 2022 and February 28thf, 2023, and received at least one dose of epoetin, were included in this retrospective, observational study. The primary outcome was inappropriate use of epoetin, defined as meeting any of the following criteria: received epoetin dose when hemoglobin > 11 g/dL, ferritin level and transferrin saturation were not obtained within 24 hours of epoetin administration, or iron supplementation was not given within 24 hours of low ferritin or transferrin saturation. Secondary outcomes include average epoetin dose, cost, incidence of adverse effects, among others.

RESULTS

79 and 62 patients were assigned to the pre- and post-protocol groups, respectively. The primary outcome occurred in 75 patients (95%) in the pre-protocol group and 54 patients (87%) in post-protocol group (p=0.0977).

CONCLUSION

Our preliminary results suggest that there was no statistically significant difference in the inappropriate administration of epoetin, however further analysis is required rule out other factors that could have affected the final outcomes.

2. An Unusual Cause of Headache: Hypertrophic Pachymeningitis

Muhammad Waqar Sharif[1#], MD, Joud Enabi[1*#], MD, Raksha Venkatesan[1], MD, Maida Faheem[1], MD, Hema Kondakindi[1], MD,

[1]Department of Internal Medicine, Texas Tech University Health Sciences Center – Permian Basin, Odessa, TX, USA

BACKGROUND

One of the rare manifestations of Granulomatosis with polyangiitis (GPA) disease is meningeal inflammation presenting as Hypertrophic Pachymeningitis. Brain MRI is the primary modality of diagnosis with two characteristic findings on MRI in those cases, including contrast enhancement and dural thickening.

CASE DESCRIPTION

A 42-year-old female presented to the emergency department for acute chest pain. Chest pain was at the midsternal region, pleuritic- type and is associated with dry cough and mild dyspnea. She also complained of chronic occipital headache associated with nausea for a few months. Physical exam was notable for left VI cranial nerve palsy and bilateral scattered inspiratory crackles. Chest CT scan revealed bilateral multilobar cavitating pulmonary lesions. Broad-spectrum antibiotics were started and her lab values revealed elevated ESR, CRP, positive Rheumatoid Factor, and ANCA. Head CT demonstrated diffuse thickening of the cerebral falx extending to the right tentorial leaf near the tentorial incisura, which was confirmed on brain MRI with contrast. Analysis of cerebrospinal fluid was unremarkable. Additional history from her former nephrologist revealed that her ESKD with double ANCA positive. A lung biopsy reported necrotizing granulomatous pneumonitis. A diagnosis of ANCA-associated vasculitis was established. Rituximab and high-dose corticosteroids were initiated. Her presenting symptoms improved after three days of pulse Methylprednisolone IV treatment.

CONCLUSION

Hypertrophic pachymeningitis is an inflammatory condition associated with thickening of the dura mater. The most common symptom is headache, which could be a diagnostic challenge due to the broad differentials of headaches and the rare incidence of HP.

3. Examining the Effects of Serotonin Reuptake Inhibitors on Body Weight in Patients with Anxiety and Mood Disorders: A Comprehensive Meta-Analysis of Randomized Clinical Trials

Chintan Trivedi[1]*, MD, MPH, Karrar Husain[1], MD, Muhammad Saad[1], MD, Mudsara Hassan[1], MD, Zeeshan Mansuri[2], MD, Barath Rangaswamy[3], MD, Shailesh Jain1, MD, MPH, MEHP

[1]Department of Psychiatry, TTUHSC – Permian Basin, Midland, Texas, USA
[2]Boston Children's Hospital/Harvard Medical School, Boston, Massachusetts, USA
[3]Department of Internal Medicine, TTUHSC – Permian Basin, Odessa, Texas, USA

BACKGROUND
While long-term use of Serotonin Reuptake Inhibitors (SRIs) is mostly linked to weight gain, little is known about their effect during the acute phase of management. The objective of this study was to evaluate the effect of SRIs on body weight in patients with anxiety and mood disorders after 10-13 weeks of treatment.

MATERIALS AND METHODS
We conducted a comprehensive search for articles that evaluated the use of SSRIs in managing anxiety and mood disorders, using databases such as Google Scholar, PubMed, and abstracts from annual scientific sessions. We collected data on change in mean body weight (kg), number of patients with weight loss, duration of treatment, number of patients by group, age, gender, drug dose, and year of the studies. Meta-analysis was performed using a fixed Effect model with the Inverse variance method to synthesize the results of these studies.

RESULTS
Our meta-analysis included six randomized clinical trial studies that compared SRIs (fluoxetine and duloxetine) with placebo. After pooling the results of these studies, we found that SSRIs were associated with a significant reduction in weight (Standardized mean difference: -0.47 (-0.35, -0.60), *p*-value <0.001) following 10-13 weeks of treatment compared to placebo. Furthermore, a greater number of patients in the SSRI group experienced weight loss compared to placebo (Odds ratio: 2.80 (1.40, 5.63), *p*=0.004).

CONCLUSION
SSRIs are associated with significant reduction in body weight after 10-13 weeks of treatment compared to placebo. Clinicians should be aware of this side effect when managing the patient.

4. A Case of Lactic Acidosis Secondary to Beriberi

Rahul Atodaria[1*#], MS3, Karthik Chamarti[2#], MD, Barath Rangaswamy[2], MD, Pranav Ganta[3], MD, Sudhir Bare[4], MD, Anand Reddy[3], MD

[1]*Texas Tech University Health Sciences Center - School of Medicine, Permian Basin, TX, USA*
[2]*Texas Tech University Health Sciences Center - Department of Internal Medicine, Permian Basin, TX, USA*
[3]*Permian Basin Kidney Center – Midland/Odessa, TX, USA*
[4]*Department of Hospital Medicine, Medical Center Hospital, Odessa, TX, USA*

BACKGROUND

Thiamine is necessary for the Krebs Cycle. Thiamine deficiency can impair aerobic metabolism and increase serum lactate. In Western countries, Beriberi is rare because of food supplementation. Also, its prevalence in these countries is limited to case reports. Recognizing Beriberi is crucial when considering the associated mortality and morbidity.

CASE DESCRIPTION

A 68-year-old woman with hypertension, asthma, type 2 diabetes, and chronic kidney disease presented with dyspnea for two weeks. History revealed no substance use. Upon presentation, she was hypotensive, tachycardic, and tachypneic with oxygen saturation of 80% on room air. Lung examination and chest x-ray were unremarkable. Labs showed lactic acidosis (anion gap 35, lactate 8.2 mmol/L), hyperglycemia, and beta hydroxybutyrate (2.85 mg/dL). CT angiogram ruled out pulmonary embolism. Prior echocardiogram revealed ejection fraction of 70-75%. The patient was treated for diabetic ketoacidosis with fluids and insulin drip which resolved the next day. The patient also received ceftriaxone and azithromycin for possible community-acquired pneumonia. The next day, patient was intubated for ongoing respiratory distress. Lactate remained elevated around 8-12 mmol/L. Persistent lactic acidosis and high cardiac output raised the suspicion for thiamine deficiency. Labs revealed a thiamine level less than 2 nmol/L (reference range 4-15). Following thiamine infusions, the lactate level normalized, and the patient's respiratory distress resolved.

CONCLUSION

We present a case of lactic acidosis secondary to Beriberi. Impairment of thiamine-dependent Krebs Cycle enzymes leads to pyruvate shunting toward lactate production. The differential diagnosis for refractory lactic acidosis should include Beriberi. Echocardiogram data indicating increased cardiac output can support this diagnosis.

5. Neurosyphilis and Bilateral Facial Palsy – Raising the Index of Suspicion

Bosky Modi[1#*], MD, Barath Rangaswamy[1], MD, Lutfor Nessa[1#], MD, MPH, Raghavendra Sanivarapu[2], MD, Pablo Feuillet[3], MD

[1]Department of Internal Medicine, TTUHSC – Permian Basin, Odessa, Texas, USA
[2]Pulmonary Critical Care, TTUHSC – Permian Basin, Odessa, Texas, USA
[3]Infectious Disease Specialist, Medical Center Hospital ProCare Infectious Disease, Odessa, Texas, USA

BACKGROUND

Bilateral facial nerve palsy is an exceedingly rare condition and presents a diagnostic challenge. It may result from cranial trauma, congenital abnormalities, inflammation, infiltration, or infection, but is rarely associated with syphilis. We present a case of bilateral facial palsy due to syphilis.

CASE DESCRIPTION

A 72-year-old male presented with Bilateral facial weakness right more than left, dysphagia and slurred speech. Stroke protocol was initiated. Neuroimaging was negative for any acute intracranial abnormality or ischemia. Patient was discharged home with diagnosis of acute Bell's Palsy on steroids. One-week later patient presented to the neurology clinic with no improvement, additionally had dizziness, occipital headache and left ear tinnitus. Patient was admitted to inpatient care. Detailed history taking revealed that patient was diagnosed and treated for syphilis at age of 16 and had severe lumbar spine pain and ambulatory dysfunction just four months prior to this presentation, raising concern for tabes dorsalis. Lumbar puncture was done. Spinal fluid analysis was positive for pleocytosis with elevated protein and RPR positive 1:16. Neurosyphilis was confirmed by VDRL 1:4 in CSF. Patient was started on IV Penicillin G for 10 days. Patient showed clinical improvement on day 3 of IV penicillin.

CONCLUSION

This case presents a misdiagnosis and delayed treatment of neurosyphilis. Due to potential neurological sequel that can be easily prevented, early diagnosis and prompt treatment is imperative. This case underscores the importance of thorough history taking and having a high index of suspicion in patients with history of STI.

6. Isolated Bone Marrow Sarcoidosis: An Elusive Extrapulmonary Manifestation

Kejal Shah[1#], MD, Hema Kondakindi[1#], MD, Joud Enabu[1], MD, Srikanth Mukkera[1], MD, Sudhir Bare[2], MD, Barath Rangaswamy[1], MD, Anand Reddy[1*], MD

[1]Department of Internal Medicine, TTUHSC – Permian Basin, Odessa, Texas, USA
[2]Department of Internal Medicine, Medical Center Hospital, Odessa, Texas, USA

BACKGROUND

Extrapulmonary manifestations of sarcoidosis are uncommon, of which Isolated bone marrow sarcoidosis is exceedingly rare, occurring in < 5% cases of sarcoidosis.

CASE DESCRIPTION

A 50-year-old female with chronic kidney disease stage 3b presented with complaints of low back pain for 3 weeks. Routine blood work showed pancytopenia and hypercalcemia (calcium 15.2 mg/dl). For severe hypercalcemia, she was treated with normal saline, calcitonin, and zoledronic acid. Blood work-up showed normal parathyroid hormone (PTH) level; PTH-related peptide was mildly elevated and urine calcium: creatinine ratio >0.01. A CT thorax and abdomen showed liver surface nodularity, mild splenomegaly, and several 3–4 mm scattered parenchymal and subpleural pulmonary nodules. Vitamin 1,25 dihydroxylase was elevated (162pg/mL); Vitamin D 25 OH was normal. Tests for multiple myeloma including serum and urine protein electrophoresis and a skeletal survey were normal. Bronchoalveolar lavage was negative for malignant cells and fungi. All markers of malignancy including CEA, CA 125, CA 19-9, and AFP were normal. For possible sarcoidosis, steroids were initiated. Lung nodules could not be biopsied due to their small size. A normal angiotensin-converting enzyme ruled out pulmonary sarcoidosis. A liver biopsy showed chronic inflammation. Bone marrow biopsy showed multifocal epithelioid non-caseating granulomas with numerous multinodular giant cells suggestive of bone marrow sarcoidosis. The patient was treated with a prolonged steroid taper.

CONCLUSION

presentations are particularly challenging to interpret and connect with the illness; and require strong clinical suspicion to identify them.

7. Amantadine and Donepezil for Post-Acute Hypoxic Encephalopathy

Triet Le1, MS3, Duc Le[1], MS3, Mark Frederickson[1], [2]*, MD, Bei Zhang[1], [3], MD, John Norbury[1], [3], MD

[1]*School of Medicine, TTUHSC, Lubbock, Texas, USA*
[2]*Encompass Health, Midland, Texas, USA*
[3]*Division of Physical Medicine and Rehabilitation, Trustpoint Rehabilitation Hospital of Lubbock, Lubbock, Texas, USA*

BACKGROUND

Amantadine is well-documented to effectively accelerating the recovery process of patients with traumatic brain injury. Donepezil, an acetylcholinesterase inhibitor, is known to improve the cognitive performance in patients with mild cognitive impairment. Here, we presented a patient with hypoxic encephalopathy (HE) that improve upon starting Amantadine and Donepezil.

CASE DESCRIPTION

A 75-year-old man had 6-day of ICU stay for acute hypoxic respiratory failure following cardiac arrest, during which he also had a short episode of seizure-like activity. After 6 days of Seroquel regimen, he remained intermittently confused prior to getting transferred to an inpatient rehabilitation facility (IRF) with a diagnosis of hypoxic encephalopathy. At the IRF, patient's Saint Louis University Mental Status (SLUMS) score was 12/30 which indicated cognitive impairment. On Day 5, Amantadine 100mg BID and Donepezil 10mg QHS were started as wife reported that patient started waking up and getting out of bed at night. Patient's cognition gradually improved. On Day 8, wife reported that patient "finally returned to his normal self". Amantadine and Donepezil were continued through 23 days of his IRF stay. By discharge, the patient's SLUM score improved to 27/30.

CONCLUSION

For our patient, Quetiapine, a commonly used antipsychotic agent carrying antihistaminic, a1-adringergic, and antidopaminergic properties, didn't help with confusion and cognitive impairment following hypoxia and electrophysiologic disturbances. The patient improved rapidly after starting on Amantadine and Donepezil. From a neurorehabilitation perspective, we would hope the case raise clinicians' attention to potential benefits (e.g., accelerated recovery) of using selected neuropharmacological agents in hypoxic and metabolic brain injuries.

8. Symmetrical Peripheral Gangrene in the Setting of Chronic Kidney Disease, Sepsis, and Late Presentation: A Case Report

Divya Parepalli[1], MD, Patrice Lamey[2]*, MS3, Sai Siva J. Mungara[1], MD, Barath Rangaswamy[1], MD

[1]*School of Medicine, TTUHSC – Permian Basin, Odessa, Texas, USA*
[2]*Department of Internal Medicine, TTUHSC – Permian basin, Odessa, Texas, USA*

BACKGROUND

Hutchinson first described symmetrical peripheral gangrene (SPG) in 1891. It is a rare syndrome of peripheral ischemic lesions affecting two or more extremities without a major vascular obstructive disease. The syndrome usually progresses quickly with patients affected developing necrosis and gangrene of distal extremities, ears, and genitalia. SPG is often seen in the inpatient setting and is frequently associated with DIC (Disseminated intravascular coagulation) or sepsis, with the prognosis worsened by common comorbidities. Mortality and morbidity rates are high, with most cases requiring amputation.

CASE DESCRIPTION

46-year-old woman with a history of uncontrolled type 2 diabetes mellitus and CKD presented for vomiting, generalized weakness, and admitted for sepsis. After becoming unresponsive and hypotensive, the patient received resuscitative efforts including norepinephrine. Twenty-four hours after admission the patient's skin of her bilateral lower extremities showed mottling. Two days later her bilateral fingertips developed dusky changes. She was then weaned off norepinephrine, extubated, and transitioned to CPAP. Thirteen days after admission the patient was transferred to our academic facility for further management. However, the extremity changes from the initial ischemic insult progressed to gangrene, requiring amputation.

CONCLUSION

Symmetrical Peripheral gangrene is a rare syndrome with rapid progression and high mortality. It is associated with many resuscitative measures taken for and risk factors common amongst the inpatient population. Complete physical exam including careful examination of arterial pulses in vulnerable patients is mandatory. If the early signs of SPG are found, prompt reversal of inotropic agent is paramount to prevent irreversible and catastrophic patient outcomes.

9. Are Hospital Staff Employed in the Department of Gastroenterology at Higher Risk of Infection with Helicobacter Pylori?

Musthafa C Peedikayil[1], [2#], Adnan Almahrouq[2], Sharon Premlall[2], Sharis Ismail[2], Fahad AlSohaibani[2], Joud M. Kossai Enabi[1*#], MD, Hamza M. Kossai Enabi[2], Alwalid M Hejazi[2]

[1]Texas Tech University Health Sciences Center – Permian Basin, Odessa, TX, USA
[2]King Faisal Specialist Hospital& Research Center

BACKGROUND

Helicobacter pylori (H. pylori) is known to be the most common cause of peptic ulcer disease (PUD) and chronic gastritis worldwide. It is estimated that up to 50% or more of the world's population is infected with H. Pylori.

MATERIALS AND METHODS

A prospective non-randomized cohort study was conducted. Physicians and nurses working in the endoscopy unit at a tertiary care hospital were tested for H. pylori by using Urea breath test. The control group included family medicine and dialysis unit medical staff. The risk of infection among the endoscopy-exposed group was calculated. The clinical staff of KFSH&RC was tested for H. Pylori infection from June 2021 to September 2021. The final sample contained 61 staff with positive or negative H pylori infection.

RESULTS

Sixty-one candidates were included in the study. Fifty-one (83.6%) of these candidates have been working at KFSGH&RC for more than one year. Eighteen (29.5%) of them were exposed to endoscopy work. The overall prevalence of H. pylori among hospital staff is 32.8%. The prevalence of H. pylori among the endoscopy group is 30%. Various factors between H. pylori-infected cases and those who tested negative were not found to be significantly different. The odds ratio for H. pylori infection for the endoscopy staff was 1.04 (confidence interval of 0.31 to 3.28) (p-value 0.73).

CONCLUSION

Overall, helicobacter pylori prevalence among hospital staff was 32.8% and 30% among endoscopy staff. Our data showed that exposure to endoscopy procedures was not a risk factor for H. pylori infection.

10. Atypical Presentation of GIST Spindle Cell Tumor Located in the Rectum as Bowel Perforation – A Case Report

M Canci[1]*, MD, Dr. Selvan Vani[1], MD, Donald Davenport[2], MD

[1]*Department of Family and Community Medicine, TTUHSC – Permian Basin, Odessa, TX, USA*
[2]*Department of Surgery, TTUHSC – Permian Basin, Odessa, TX, USA*

BACKGROUND

Gastrointestinal tumors (GIST) are rare mesenchymal gastrointestinal tumors of the GI tract, furthermore their location in the rectum represents 0.1% of all colorectal tumors.

CASE DESCRIPTION

Here we present a 45-year-old male admitted for diffuse abdominal pain, nausea, and vomiting. CT of the abdomen with contrast reported an ulcerative mass of 8 cm at the rectosigmoid colonic junction along with liver metastases. Underwent an emergent exploratory laparotomy where he had transection of the sigmoid colon and rectum due to evidence of perforation of the neoplasm into the pelvis with some free-floating tumor along with liver biopsies and colostomy placement and possible biopsy of hepatic lesions. Histopathology of the mass revealed a high-grade GIST of the rectum, spindle cell type, and lymphovascular invasion. Liver biopsy results were consistent with a metastatic malignant gastrointestinal tumor. The patient was referred to Oncology for further management and treatment, started on TK inhibitors, and is currently doing well, 6 months post-operatively.

CONCLUSION

This case report aims to present this case of an atypical, disseminated rectal GIST, presenting as a large mass with bowel perforation. This is an atypical and acute form of presentation, with no prodromes in in young patient.

11. Viloxazine Associated Partial Priapism in Children, Case Report

Wisam Al Jumaili[1]*, MD, Shailesh Jain[1], MD, MPH, MEHP

[1]Department of Psychiatry, Texas Tech University Health Sciences Center – Permian Basin, TX, USA

BACKGROUND

Priapism is medical and surgical emergency that can affect both sexes and in any age. Priapism can cause long term major medical and surgical structural sequel. Priapism can be ischemic or non-Ischemic (drug related) in nature. Psychotropics contribute to more than half of drug induced priapism. α-Adrenergic blocking properties and or serotonin/norepinephrine activity play a major role in pathophysiology. Viloxazine psychotropic, non-stimulant ADHD, serotonin/norepinephrine selective reuptake inhibitor, approved to be used in children. Theoretically can associated with priapism but this adverse effect not listed within its side effects.

CASE DESCRIPTION

The author reports a 10-year-old male ADHD patient with viloxazine induced priapism in outpatient psychiatric care. Discontinuing the medication subside the priapism. Rechallenging the medication in smaller dose have not associated with similar side effect. Adverse drug reaction probability scale score 6.

CONCLUSION

Viloxazine like other ADHD medication can associated with priapism in children or adult. Pediatric provider, patient and families should be aware of this serious complication and side effect of the medication.

12. Infective Endocarditis Caused by Neisseria Elongata on a Native Mitral Valve

Laura Gonzales[1#], MD, Alejandro Herrera[1*#], MD, Rami Al-Ayyubi[1], MD, Pablo Feuillet[2], MD

[1]*Internal Medicine, Texas Tech University Health Sciences Center School of Medicine, Odessa, TX, USA*
[2]*Chairman Infectious Disease and Infection Control, Medical Center Hospital, Odessa, TX, USA*

BACKGROUND

Neisseria elongata (NE) is a commensal organism of the human oropharyngeal flora that has been identified as a very rare cause of infective endocarditis. We present a case of a young healthy female patient without comorbidities or risk factors.

CASE DESCRIPTION

A 23-year-old female with medical history concerning migraines and endometriosis, presented with a 4-week history of severe headaches and intermittent fevers. She had dental braces and once a month dental checkup. There was no history of recent travels, drug abuse or congenital heart disease.

On admission, the patient was hypotensive and tachycardic. Electrocardiogram showed sinus tachycardia. Blood cultures (BC) were positive for gram-positive cocci in chains however never reported a specific organism, and a new systolic murmur was found on the left sternal margin. transthoracic echocardiography reported a moderate to severe mitral valve (MV) regurgitation was unable to exclude vegetation. A transesophageal echocardiogram identified a 1.7 cm vegetation on the posterior leaflet of the MV associated with a prolapse.

On day 5, BC identified non-spore-forming aerobic bacilli in aerobic and anaerobic bottles. BC were sent to an outside laboratory for specific organism identification, which resulted positive for NE. Cardiothoracic service recommended surgical approach once the infection was utterly treated. The approach initially consisted of broad-spectrum antibiotics with concern about central nervous system infection. Once NE was identified, monotherapy with ceftriaxone was completed for 42 days.

CONCLUSION

NE is a rare cause of infective endocarditis, and unfamiliarity with the causal organism and rod-like morphology may delay diagnosis and treatment.

13. Multiple Hospitalizations Due to Electrolyte Imbalance! What Are We Missing?

Pedro Rojas[1]*, MD, Vijay Eranki[2], MD, Dannel Diaz[2], MD, Barath Rangaswamy[1], MD

[1]Department of Internal Medicine, Texas Tech University Health Sciences Center – Permian Basin, Odessa, TX, USA
[2]Department of Endocrinology, Texas Tech University Health Sciences Center – Permian Basin, Odessa, TX, USA

BACKGROUND

Proton-pump inhibitors (PPIs) are one of the most common medications used for acid-related gastrointestinal disorders. PPIs are an important cause of hypomagnesemia, with reported cases occurring after prolonged use, which rapidly reverses upon drug discontinuation. Hypokalemia and hypocalcemia are also frequently associated electrolyte disorders.

CASE DESCRIPTION

A 69-year-old female with Barrett's esophagus and gastrointestinal reflux disease on Lansoprazole 30 mg two times daily since 2003 presented for the third time to the hospital with a 3-week history of muscle spasms, palpitations, and tetany-like features on bilateral lower extremities. Laboratory studies showed hypomagnesemia with a magnesium level of 0.7 mg/dL (1.6-2.3), calcium was 6.3 mg/dL (8.8-10.2), and potassium was 2.9 mmol/L (3.5-5.2). She was treated with 4 g of calcium gluconate IV, 4 g of magnesium sulfate IV, 100 mEq potassium chloride (KCl) oral and 40 mEq of KCl IV. She was discharged on KCl 20 mEq oral tablet twice daily, magnesium oxide 500 mg oral tablet twice daily, calcium carbonate two tablets 500 mg three times daily, and was advised to follow up with endocrinology as an outpatient. Upon follow-up, labs showed corrected calcium for albumin 9.1 mg/dl, PTH 66.4 pg/ml (15-65pg/ml), vitamin D 25 OH 30.7 ng/DL, magnesium 2mg/dl and potassium were 4.8 mmol/L (3.5-5.2), but she continued the PPI.

CONCLUSION

The likely etiology was PPI-induced hypomagnesemia, causing all hypomagnesemia leading to all other electrolytes unbalance. Hypomagnesemia associated with PPI use is considered rare, but clinicians must be vigilant for this potential side-effect, especially in patients on long-term therapy with PPIs.

14. Depression and Anxiety - Diagnosis and Management in Primary Care: A Review

Roy Sebastian[1*#], MD, Abasiodu Umoh[1#], MD, Vani Selvan[1], MD

[1]Department of Family Medicine, Texas Tech University Health Sciences Center – Permian Basin, Odessa, TX, USA

BACKGROUND

It has been estimated that between 10-20% of adults in any given 12-month period will experience an episode of anxiety or depressive disorder and visit their primary care physician, typically for a non-psychiatric complaint. These psychiatric comorbidities complicate the situation and increase medical utilization. So, it is very crucial to diagnose depression and anxiety in primary care.

MATERIALS AND METHODS

A review of research articles was done in PubMed and Cochrane library using the search words" depression in primary care", "depression" "cognitive behavioral therapy", and "antidepressants". Out of 12 articles reviewed, 10 articles provided information on diagnosing depression and anxiety in primary care and recommendations on effective treatment strategies for various levels of depression, combined depression and anxiety, and various pharmacotherapeutics.

RESULTS

Cognitive-behavioral therapy (CBT) showed a higher response and remission rate for treating depressive and anxiety disorders. Randomized controlled trials (RCT) anxiety disorder showed that collaborative care was superior to usual care in managing anxiety disorder. Brief CBT had a greater impact on clinical outcomes in anxiety compared to depression. Treatment effects were found for CBT and problem-solving therapy (PST) for depressive and anxiety disorders. Interventions delivered outside primary care settings were more effective than those within, individual treatment had greater treatment effects compared to group treatment, and both technology-assisted and in-person treatments were found to be effective.

CONCLUSION

Patients with depression and anxiety disorders presenting to primary care will benefit from early diagnosis and CBT outside the primary care settings. They will have better outcomes when CBT is combined with pharmacotherapy.

15. Low-Risk Pregnancies Versus High-Risk Pregnancies in a West Texas Academic Clinic

Cornelia de Riese[1]*, MD PhD MBA, Jasmin Freeborn[2], MS3, Asley Sanchez[1], BS, Kushal Gandhi[1], PhD

[1]Department of Obstetrics of Gynecology, TTUHSC – Permian Basin, Odessa, Texas, USA
[2]School of Medicine, TTUHSC – Permian Basin, Odessa, Texas, USA

BACKGROUND

Since 1987, there has been a rise in pregnancy-related morbidity and mortality despite improvements in medical diagnosis and treatment, from 7.2 deaths per 100,000 live births to 23.8. Rural areas compared to urban areas have a higher rate of pregnancy-related mortality. There is a significant gap across marginalized groups as well with non-Hispanic Black persons at an alarming rate of 41.4 fatalities per 100,000 live births. Unfortunately, there is an increasing number of pregnancies with concurrent chronic health conditions including cardiovascular disease, chronic hypertension, and metabolic diseases such as diabetes.

The purpose of this study is to quantify high-risk pregnancies in our population to generate awareness among the public and medical professionals regarding the prevalence of high-risk pregnancies in West Texas.

MATERIALS AND METHODS

A retrospective chart review was carried out to obtain information on clinic visits from September 2022 to November 2022. Using the EMR, electronic records were screened for pregnancy codes and charts were reviewed to classify patients as either low-risk or high-risk.

RESULTS

This study will include 1000 patients (between 18 and 55 years old and greater than 12 weeks pregnant). 30% of our patient population has low-risk pregnancies, whereas 70% are considered high-risk pregnancies.

CONCLUSION

Our research shows a significant population of high-risk pregnancies within West Texas. Current literature implies that the cause of increased mortality in pregnancy is still unknown; therefore, it is crucial to conduct additional research to lower the rates of maternal morbidity and mortality in pregnant persons.

16. Quality Improvement Project to Reduce 30 Day Hospital Readmission Rates in Heart Failure and CABG Patients

Muhammad Waqar Sharif[1#*], MD, Barath Rangaswamy[1#], MD, Kayla Bairrington[2], RN Meredith E. Hulsey[3], DO

[1]Department of Internal Medicine, TTUHSC – Permian Basin, Odessa, TX, USA
[2]Quality Control Specialist – Medical Center Hospital, Odessa, TX, USA
[3]Chief Medical Officer, Medical Center Hospital, Odessa, TX, USA

BACKGROUND

Hospital readmissions contribute substantially to the overall healthcare cost. We describe the QI project performed at Medical Center Hospital from CY 2020 through CY 2022 to reduce Heart Failure (HF) and CABG readmissions.

MATERIALS AND METHODS

The 30 days HF readmission rates were identified as 18.6 and 18.97 for all payer and medicare for CY2020. Chart reviews and patient interviews done and trend of redmissions tracked with clinical surveillance software (Vigilanz). Improvement in transition of care was done by arranging follow up appointment within 7 days of discharge, follow up phone calls on post discharge day 2 and weekly once for four weeks. Staff education and patient education augmented. The 30 days CABG re admission rates were 20.59 and 10.53 for medicare and all payers. Barriers determined. Surgical site infection and acute heart failure were the common causes. Discharge packets optimized to improve transition of care in wound care and discharge instructions. Post discharge follow up resources augmented. Meds to Bed program for discharged patients ensured compliance especially on weekends. Patient education and engagement was improved by on demand video education.

RESULTS

The HF 30 days readmission rates for medicare were reduced from 18.97% to 12.84%, whereas the rates for all payers reduced from 18.16 to 17.18 from CY2020 through CY2021. CABG rates for medicare reduced from 20.59 to 15.15 (CY 2021) further reduced to 9.38 (CY 2022), whereas rates for all payers reduced from 14.1 to 7.95, for CY 2021 through CY2022.

CONCLUSION

The above results describe the impact of the QI projectS.

17. Evaluation of Anti-Xa Level Monitoring of Enoxaparin for Thromboprophylaxis in High-Risk Patients

Thao-Mi Vu[1]*, PharmD, Thu Thao Do[1], PharmD, Kristina Chang[1], PharmD, BCPS, Barath Rangaswamy[2], MD

[1]Department of Pharmacy, Medical Center Hospital, Odessa, Texas, USA
[2]Department of Internal Medicine, TTUHSC – Permian Basin, Odessa, Texas, USA

BACKGROUND

Enoxaparin is used for thromboprophylaxis in patients during acute illness and undergoing surgery. Current literature questions whether standard dosing is adequate in patients at high risk of clotting and bleeding. Anti-Xa levels have been proposed to assess the activity of enoxaparin and to ensure safe and effective dosing in these patients. This study evaluates the utility of anti-Xa monitoring for enoxaparin in obtaining therapeutic levels and preventing thromboembolism and bleeding.

MATERIALS AND METHODS

This retrospective, observational study examined patients who received enoxaparin pre/post enoxaparin dosing and anti-Xa protocol implementation between September 2022 and April 2023 using clinical decision support database and chart review. High-risk patient populations were defined as low body weight, morbid obesity, renal impairment, or trauma. The primary outcomes are incidence of thromboembolism and major bleeding within 30 days. Secondary outcomes assessed initial enoxaparin dosing, anti-Xa levels and dose adjustments.

RESULTS

There were 200 patients that met inclusion criteria (n= 106 in PRE-group; n= 94 in POST group) in the preliminary results. Incidence of thromboembolism within 30 days occurred in 4% of PRE-group and 2% of POST group. There was no difference in incidence of major bleeding within 30 days. Of the number of initial anti-Xa levels drawn appropriately in the POST group (n=39), 48% were subtherapeutic, 48% were therapeutic, and 8% were supratherapeutic. The average number of levels to achieve therapeutic levels was 1.4.

CONCLUSION

Preliminary results demonstrated a lower incidence of thromboembolism in the post-protocol implementation group. Future prospective studies are warranted to confirm results.

18. Two-year Follow Up of Anomalous Coronary Artery from The Opposite Sinus with Interarterial Course

Alejandro Herrera[1]*, MD, Pablo Amador Mejia[1], MD, Rami Al-Ayyubi[1], MD, Joud Enabi[1], MD, Laura Gonzales[1], MD, Francisco J. Somoza-Cano[2], MD, Michele P. Sartori[3], MD

[1]Department of Internal Medicine, Texas Tech University Health Sciences Center – Permian Basin, Odessa, TX, USA
[2]St. Vincent Charity Medical Car, Cleveland, OH, USA
[3]CHI St. Luke's Health - Baylor St. Luke's Medical Center, Houston, TX, USA

BACKGROUND

Congenital coronary anomalies have a global incidence of 5.64%. Previous studies reported an incidence of anomalies of the left coronary artery from the right sinus (L-ACAOS) of 0.15%. In the absence of practice guidelines, the current consensus to approach L-ACAOS is surgical revascularization for symptomatic patients, for secondary prevention of sudden death, or in the absence of symptoms when associated with high-risk features.

CASE DESCRIPTION

A 40-year-old Caucasian male self-referred for a second opinion. He had survived witnessed cardiac arrest 4 years prior. Coronary angiography (CAG) had documented an L-ACAOS for which he was advised to undergo surgical revascularization, which he refused; nevertheless, an automated implantable cardioverter defibrillator (AICD) was implanted.
Computerized tomography coronary angiography confirmed an L-ACAOS with intramural intraarterial course between the aorta and pulmonary artery. Stress electrocardiogram was negative. Initial approach was to continue medical treatment; however, 6 months later patient persisted with complaints of chest pain and presyncope episodes. AICD Interrogation reported episodes were secondary to ventricular tachycardia and one episode of ventricular fibrillation. Selective CAG was performed, and a 4.0 mm stent was successfully deployed proximal to the bifurcation all the way back to the left main ostium. Since intervention patient has been asymptomatic with AICD interrogation negative for new arrhythmias.

CONCLUSION

In the absence of practice guidelines, the current consensus of the approach L-ACAOS favors referring patients for surgical correction, particularly those with high-risk features. Nevertheless, we can consider coronary angioplasty with stent deployment in cases where anatomy is suitable or patient refuses surgical intervention.

19. PRSS1-related hereditary pancreatitis

Roy Sebastian1*#, MD, Abasiodu Umoh[1#], MD, Vani Selvan[1], MD

[1]Department of Family Medicine, Texas Tech University Health Sciences Center – Permian Basin, Odessa, TX, USA

BACKGROUND

Serine Protease 1(PRSS1) related hereditary pancreatitis (HP) presents as episodes of acute pancreatitis (AP) in children and recurrent acute pancreatitis (RAP) with progression to chronic pancreatitis (CP) in 50% of patients. The median age of presentation of PRSS1-related pancreatitis is 10-12 years of age. Among the affected individuals, 40% may develop pancreatic cancer by the age of 15. PRSS1 gene is responsible for the production of cationic trypsinogen enzyme. Mutation of the PRSS1 gene causes the production of mutant trypsinogens that prematurely gets converted to trypsin while it is still in the pancreas leading to autodigestion of pancreas. Progression to chronic pancreatitis is prevented by treating the manifestations of acute pancreatitis, avoiding smoking, alcohol use, dehydration, following a healthy lifestyle, referral to a surveillance program, and genetic screening of relatives at risk for PRSS1 mutation.

CASE DESCRIPTION

We report a case of a six-year-old Hispanic female with recurrent acute pancreatitis secondary to PRSS1 gene mutation.

CONCLUSION

Progression to chronic pancreatitis and possible subsequent pancreatic cancer is prevented by treating the manifestations of acute pancreatitis, avoiding smoking, alcohol use, dehydration, following a healthy lifestyle, referral to a surveillance program, and genetic screening of relatives at risk for PRSS1 mutation.

20. Perineal White Piedra in a Central American Immigrant: A Case Report and Literature Review

Dakota Tolleson[1], MS3, Asley Sanchez[1], BS, Gary Ventolini[1]*, MD, FACOG, FAAFP, Kushal Gandhi[1], PhD, John Garza[1,2], PhD

[1]Texas Tech University Health Sciences Center at the Permian Basin, School of Medicine, Department of Obstetrics and Gynecology, Odessa, TX, USA
[2]The University of Texas Permian Basin, Department of Mathematics

BACKGROUND

Infections caused by Trichosporon species are reported to be rare and often underdiagnosed. These infections tend to occur at the hair shafts and treatment is relatively straight forward with the use of oral and topical antifungals. It is important to educate patients at the time of diagnosis and treatment on potential risk factors and good hygiene practices in order to prevent reinfection.

Objectives:
educate both patients and clinicians on white piedra infections
educate on treatment and prevention of these infections

CASE DESCRIPTION

A 25-year old immunocompetent female Honduran immigrant presented to a specialty clinic after noticing "white debris" in her perineal area while shaving. Gross examination revealed pearly-white nodules and a 0.9% wet mount revealed yeast cells around hairs in a concentric fashion. Pathology confirmed infection caused by Trichosporon species. She was advised to shave the affected area with a sanitized blade, given 200 mg fluconazole PO daily for 30 days, and a 2% ketoconazole cream to use in the affected area. At four weeks follow-up her condition was in complete remission and patient was advised continue personal hygiene practices and to avoid having the affected area wet or damp.

CONCLUSION

It is important to correctly identify the causative agent for infection, especially one as rare as white piedra which tends to recur. It is important for clinicians to advise the patient to continue following good hygiene practices and to avoid having the affected areas wet or damp to prevent reinfection.

21. Reducing Hospital Length of Stay (LOS) Metric – Quality Improvement in Utilization Management

Joud Enabi[1#], MD, Barath Rangaswamy[1*#], MD, Karime Ramirez2, BSN, RN, Meredith E. Hulsey[3], DO

[1]Department of Internal Medicine, TTUHSC – Permian Basin, Odessa, TX, USA
[2]Director of Care Management, Medical Center Hospital, Odessa, TX, USA
[3]Chief Medical Officer, Medical Center Hospital, Odessa, TX, USA

BACKGROUND

Hospital Length of Stay (LOS) refers to the average number of days that patients spend in hospital. It is generally measured by dividing the total number of days stayed by all inpatients during a year by the number of admissions or discharges. Hospital LOS is quality metric health systems use as a proxy of efficient hospital management. Decreased LOS has been associated with decreased risks of opportunistic infections and lower mortality rates. Shorter LOS reduce the economic burden of both hospital and patients and increase the bed turnover rate increasing the profit margin of hospitals. We describe the QI project of improving LOS at Medical Center Hospital implemented Dec 2021 through July 2022.

MATERIALS AND METHODS

Organizational interventions, staffing model, multidisciplinary team care and improved communications with physicians formed the multi-pronged approach to this project which was started on Dec 2021. Length of stay meetings including physicians were conducted on a weekly basis by Utilization Management to identify early discharges early, high risk patients, co ordinating discharge medication processing. These multi-disciplinary meetings improved communication and physician input. Starting from March 2022, Care management led daily huddles were conducted on each unit focusing throughput discharges and improving discharge delays. The staffing model of weekend care management coverage was started on June 2022.

RESULTS

LOS weekly meetings reduced the LOS from 7.5 to 5.5, Daily huddles reduced it further to 4.9, which was further reduced to 4.1 after the weekend staffing model.

CONCLUSION

This study underscores the importance of multidisciplinary approach needed to achieve this metric

22. Shrinking Syndrome: A Rare Pulmonary Complication of Systemic Lupus Erythematosus

Kejal Shah[1]*, MD, Samhitha Gonuguntla[2], MD, Hema Kondakindi[1], MD, Joud Enabi[2], MD, Barath Rangaswamy[3], MD, Srikanth Mukkera[3], MD

[1]PGY[2] Internal Medicine Resident, Department of Internal Medicine, TTUHSC – Permian Basin, Odessa, TX, USA
[2]PGY[1] Internal Medicine Resident, Department of Internal Medicine, TTUHSC – Permian Basin, Odessa, TX, USA
[3]Assisstant Professor, Department of Internal Medicine, TTUHSC – Permian Basin, Odesa, TX, USA

BACKGROUND

Shrinking Lung Syndrome (SLS) is a rare pulmonary complication of autoimmune diseases, mostly seen in systemic lupus erythematosus (SLE).

CASE DESCRIPTION

A 38-year-old female with a recent diagnosis of SLE on hydroxychloroquine, prednisone, and methotrexate treatment, presented with insidious onset, progressive shortness of breath, non-productive cough, and pleuritic chest pain for one week. She was tachypneic with few fine crackles bilaterally. Laboratory studies showed pancytopenia. She was treated with broad-spectrum antibiotics and high-dose methylprednisolone for 3 days for a lupus flare. Blood, sputum, and fungal cultures after bronchoscopy were negative. Acid-fast bacilli and tuberculosis QuantiFERON were negative. Chest X-ray revealed bilateral airspace disease, and CT revealed elevated right hemidiaphragm. Autoimmune workup revealed high titers of antinuclear antibodies with speckled pattern, positive anticardiolipin antibody, ribonucleoprotein, and anti-smith antibody. She was diagnosed with shrinking lung syndrome, and given a steroid taper and hydroxychloroquine therapy. Additionally, she received a rituximab infusion and showed significant improvement. Outpatient pulmonary function tests (PFT) showed a restrictive pattern.

CONCLUSION

Shrinking lung syndrome is a rare pulmonary complication seen in SLE, with a prevalence of 1%. The pathophysiology is believed to be decreased diaphragmatic muscle thickness and diaphragmatic dysfunction secondary to pleural adhesions, pleural inflammation leading to impaired deep inspiration and eventually leading to decreased lung volumes, phrenic nerve paralysis, and altered surfactant in the lungs. Rituximab, alone or in combination with cyclophosphamide has shown improvement in symptoms and PFT's. There is little knowledge about shrinking lung syndrome due to its rarity, so the therapy is scarce.

23. CABG Complicated by Hemorrhagic Shock in Patient Taking SAW PALMETTO

Rami Al-ayyubi[1]*, MD, Laura Gonzales Reyes[1], MD, Joud Enabi[1], MD, Jehangir Malik[1], MD, Muhammad Qudrat Ullah[1], MD, Alejandro Jose Herrera Ramos[1], MD, Catalasan Gerardo[1], MD, Awtrey Stanton[1], MD

[1]Department of Internal Medicine, TTUHSC – Permian Basin, Odessa, Texas, USA

BACKGROUND

Saw palmetto is considered one of the most widespread herbal supplements used by patients complaining of LUTS. While some studies documented the efficacy of saw palmetto in relieving the obstructive symptoms of BPH, other studies established its side effects, mainly coagulopathy and increasing risk of bleeding. In this case report, we present a case of post-CABG coagulopathy in a patient using saw palmetto to treat symptoms of BPH.

CASE DESCRIPTION

A 68-year-old male with a past medical history of coronary artery disease, transient ischemic attacks, and BPH presented with NSTEMI. On cardiac catheterization the patient was found to have triple vessel disease. He underwent CABG 4 days later. Postprocedural bleeding was difficult to control and the patient underwent secondary re-exploration. He received multiple transfusions until bleeding was controlled. No source was identified. In addition, ROTEM demonstrated prolonged clotting time in both EXTEM and INTEM. Saw palmetto was hypothesized to be the primary etiological factor for the patient's hemorrhagic shock.

CONCLUSION

With this report, we aim to demonstrate a case of postoperative hemorrhagic shock in a patient taking the OTC saw palmetto, commonly used for LUTS in men. Even though there is a lack of evidence of saw palmetto's effect on hemostasis and coagulation pathways, this report should prompt further investigation into saw palmetto's coagulopathic effect in the form of randomized control trials and retrospective case-control studies.

With this example in sight, physicians must perform a thorough medication review during preoperative evaluation including OTC supplement use before clearing the patient for invasive surgery.

24. Giant Cervical Polyp Causing Breakthrough Bleeding After Beginning Estrogen Based Oral Contraceptives

Kristina Cross[1#], MS3, Dakota Tolleson[1#], BS, Ashley Sanchez[2], BS, Gary Ventolini[2*], MD, FACOG, FAAFP

[1]School of Medicine, TTUHSC – Permian Basin, Odessa, Texas, USA
[2]Department of Obstetrics and Gynecology, TTUHSC – Permian Basin, Odessa, Texas, USA

BACKGROUND

Giant Cervical Polyps (GCP), defined as a polyp greater than 4 cm in length, are a rare pathology largely in premenopausal nulliparous women. GCP typically present as painless, vaginal bleeding not congruent with the menstruation cycle. A true benign GCP is a rarity and interesting since the etiology is still unknown.

CASE DESCRIPTION

A gravida 1 para 1, 21-year-old patient with no relevant past medical history and regular menstrual periods was prescribed low estrogen oral contraceptive after presenting to the obstetrics and gynecology clinic at Texas Tech University Health Sciences Center. Five months later, the patient returned with a chief complaint of breakthrough bleeding and was switched to medium estrogen oral contraceptive. After three months, the breakthrough bleeding persisted and was noted to be more accentuated 1-2 days after sexual intercourse. A 5 cm long by 1.2 cm wide pedunculated cervical polyp was found on pelvic examination and was removed in office without complication. Histology of the polyp revealed no malignancy, confirming benign GCP, and breakthrough bleeding resolved after 2 weeks.

CONCLUSION

Reproductive-age women's unique combination of hormonal and growth factors combine to promote the significant growth of GCP. GCP should be routinely removed for symptom relief and, importantly, histological review because the differential diagnosis is broad and GCP may be masking more serious conditions, such as malignancy. The diagnosis of cervical polyp can be complicated by cervicitis or pelvic infection and GCP are known to be concurrent with endometrial polyps. Thus, polyps should be removed, examined histologically, and the patient should be checked for coexisting polyps.

25. Use of Avacopan in Antineutrophil Cytoplasmic Antibody – Associated Vasculitis with Diffuse Alveolar Hemorrhage

Hema Kondakindi[1], MD, Kejal Shah[1], MD, Duy Chung[2], MBBS, Luan Ngo[2], MBBS, Srikanth Mukkera[1], MD, Barath Rangaswamy[1], MD, Alejandra Garcia Fernandez[1]*, MD

[1]Department of Internal Medicine, TTUHCS – Permian Basin, Odessa, TX, USA
[2]School of Medicine, Pham Ngoc Thach University of Medicine, Ho Chi Minh City, Vietnam

BACKGROUND

Diffuse alveolar hemorrhage (DAH) is an uncommon but serious complication of AAV (ANCA associated vasculitis) with a high mortality rate. We present a case of a 52-year-old male patient who was found to have DAH, positive for ANCA-PR3 and effect after starting Avacopan.

CASE DESCRIPTION

A 52-year-old Hispanic male presented with gradually worsening shortness of breath from six weeks, three days of hemoptysis. He was tachypneic and hypoxic on presentation. Chest x ray showed bilateral multifocal infiltrates. CT chest revealed multifocal pneumonia. Patient was started on IV antibiotics for pneumonia, but continued to have increasing oxygen requirements, requiring endotracheal intubation, mechanical ventilation. Sputum cultures were negative, with elevated erythrocyte sedimentation rate. Bronchoscopy revealed diffusely erythematous bronchial mucosa, with copious bloody secretions suggestive of DAH. Patient was started on pulse dose steroids for 3 days with a tapering dose, 7 days of plasmapheresis followed by Rituximab once weekly for 4 weeks. ANCA panel was positive for ELISA IG PR3. Patient has clinically improved after this treatment. Broncho alveolar lavage cytology showed respiratory epithelial cells, histiocytes, mixed inflammation in a background of blood. Patient was transitioned to tracheostomy. Patient was discharged on methotrexate subcutaneous weekly, oral prednisone daily, oral Avacopan 30 mg twice daily. At 4 weeks follow up at Rheumatology office, tracheostomy collar was removed, his condition completely resolved.

CONCLUSION

DAH is a rare complication of Granulomatosis with Polyangiitis. Avacopan, is a new drug approved by FDA in October 2021 that has changed the course of disease.

26. Medical Education Innovation Initiative – Improving Radiology Curriculum by Reading Room Radiology Rounds

Barath Rangaswamy[1#*], MD, Srikanth Mukkera[1], MD, Vishaal Kondoor[2#], MS3, Karim Sulaiman[1], MS3, Duc Le[2], MS3, George Rodenko[3], MD, Stephanie Stroever[4], PhD

[1]*Department of Internal Medicine, TTUHSC – Permian Basin Odessa, Texas, USA*
[2]*School of Medicine, TTUHSC – Permian Basin, Odessa, Texas, USA*
[3]*Chief of Radiology, Department of Radiology, Medical Center Hospital, Odessa, Texas, USA*
[4]*Clinical Research Institute, TTUHSC – Lubbock, Texas, USA*

BACKGROUND

There is evidence that medical students in U.S are not receiving adequate education in radiology

MATERIALS AND METHODS

We used a cross sectional survey of MS3 & MS4 for descriptive statistics and Fisher's exact to compare responses across years and set a = 0.05 a priori for hypothesis testing.

RESULTS

Response rate was 66.6% (n = 30). 80% agreed radiology is very/critically important to their future practices. 60% believed current education is inadequate, 23.3% very inadequate. 23.3% were not at all confident to interpret basic X-rays, 46.7% slightly confident, and 20.0% somewhat confident,10% very confident. 76% ranked a radiologist as their top preference for teaching fundamentals of radiograph interpretation. IM and emergency medicine faculty were ranked first by 16.7% and 3.0% of students, respectively. 90% either agreed or strongly agreed that including brief reading room visits into the IM curriculum could be a valuable alternative when a separate rotation is not feasible. 40% preferred weekly visits, 30.0% biweekly, and 23.3% monthly. 53.3% preferred radiology education to be didactic and 36.7% prefer group learning, 10% online learning modules. No significant differences in perceptions across cohorts. Many questions had almost identical endorsements across categories including confidence to interpret x-rays (p = 0.91), the value of reading room visits (p = 1.00), and frequency of these visits (p = 1.00).

CONCLUSION

Radiology curriculum improvement can be done by arranging reading room visits for increased teaching and student engagement with radiologists. We are successfully using this strategy in the IM clerkship at our medical school campus.

27. Splenic Abscess of Unknown Etiology with Atraumatic Spontaneous Splenic Rupture

Vidya Bharati Sinha[1*#], MD, Sania Dhanani[1#], MD, Vani Selvan[1], MD

[1]*Department of Family Medicine, Texas Tech University Health Sciences Center – Permian Basin, Odessa, TX, USA*

BACKGROUND

A splenic abscess (SA) is a rare infectious suppurative pathology involving either the splenic parenchyma or the subcapsular space with a 0.05-0.07% incidence and 70% mortality rate. Collective presentation with the triad of fever, left upper quadrant pain and leukocytosis. The common causes are infective endocarditis and bacteremia and rarely by splenic infarction, immunocompromised conditions, metastatic infection, and diabetes.

CASE DESCRIPTION

A 65-year-old Caucasian male with past medical problems of diabetes, hypertension, COPD, and partial colectomy for sigmoid diverticulitis, was hospitalized due to the sudden onset of left hypochondrium pain, and hypotension along with intermittent fever, nausea, anorexia, fatigue, and weight loss for the last six months. He denied any history of trauma or involvement in contact sports. Computerized tomography angiogram of the abdomen and pelvis showed grade 3 splenic injury with intraparenchymal and subcapsular hematoma, laceration, and hemoperitoneum. He underwent emergent exploratory laparotomy with splenectomy, evacuation of peri splenic abscess, lysis of adhesions, and partial omentectomy. Transesophageal echocardiogram did not identify endocarditis, intracardiac mass thrombus, or vegetation. Blood culture was negative. Intraoperative abscess culture was positive for non-spore forming gram-positive catalase-negative bacillus. The pathology report was positive for splenic abscess without evidence of malignancy. He was discharged with amoxicillin-clavulanic acid for 21 days.

CONCLUSION

Splenic abscess is rare but life-threatening if left untreated due to spontaneous splenic rupture. Therefore, it is essential to consider this as one of the differentials in a patient presenting with acute abdominal pain.

28. Comparison of Biofilm Growth and Quorum Sensing Molecules in Vaginal Lactobacillus Species

Duc Le[1], BS, Asley Sanchez[1], BS, Kushal Gandhi[1], PhD, Fnu Alimiran[2], MS, Samuel David[3], PhD, Christopher B. Babayco[3], PhD, Triet Le[1], BS, John Garza[4], PhD, Gary Ventolini[1]*, MD, FACOG, FAAFP

[1]Department of Obstetrics and Gynecology, TTUHSC – Permian Basin, Odessa, Texas, USA
[2]Department of Chemistry, the University of Texas Permian Basin, Odessa, Texas, USA
[3]Department of Chemistry, Southern Oregon University, Ashland, Oregon, USA
[4]Department of Mathematics, the University of Texas Permian Basin, Odessa, Texas, USA

BACKGROUND

Biofilms are the collections of bacterial communities adhering to various surfaces which allow these microorganisms to survive in the microbial world. The mechanisms for the growth of bacterial biofilms and the compounds produced are under scrutiny for the treatment of pathogenic infections. In this study, we isolate quorum sensing (QS) compounds that sustain viable biofilms in hopes of treating infections.

MATERIALS AND METHODS

Three bacterial species, *Lactobacillus gasseri*, *L. crispatus*, and *L. jensenii*, harvested from human female subjects were used to carry out experiments examining the growth of biofilms using a micro-fermenter system. The bacteria were used to inoculate a glass rod spatula which was subsequently transferred to the micro-fermenter system. The resulting biofilm growing on the glass spatula was harvested in MRS broth and stored in a -800C freezer for Gas chromatography-mass spectroscopy analysis.

RESULTS

We found that quorum sensing compounds, acyl homoserine lactones (AHLs), were detected in the biofilm of *L. crispatus* and *L. jensenii* whereas none was detected in *L. gasseri*. The biofilm produced by *L. crispatus* and *L. jensenii* was much higher in quantity than the biofilm produced by *L. gasseri*.

CONCLUSION

Aside from oligo-peptides quorum sensing, Gram-positive bacteria lactobacilli were found to also have AHL compounds that may help them produce more biofilms and improve the survival and growth of their bacterial communities in the female genital area. The potential confounding variables in oligo-peptide are induced QS amounts as well as a more thorough AHL profile that might have a greater impact on the biofilm formation.

29. You Are What You Eat: Quality of Diet and Its Impact on Mental Health

Darshini Vora[1#*], MD, Chintan Trivedi[1#], MD, MPH, Aiswarya Nandakuma[1], MD, Mudasar Hassan[1], MD, Yashar Yousefzadeh Fard[1], MD, Mixngxu Zhang[1], MD, Shailesh, Jain[1], MD, MPH, MEHP

[1]Department of Psychiatry, Texas Tech University Health Sciences Center – Permian Basin, Midland, Texas, USA

BACKGROUND

There is evidence in the literature that the quality of one's diet can have a direct impact on their mental health. This study aims to investigate the link between diet quality and mood.

MATERIALS AND METHODS

This ongoing study aims to collect dietary information from patients aged >=12 who are visiting a psychiatry clinic. Patients were provided dietary counseling during baseline visits. Further, patients were stratified into two groups (Group 1: patients following a "healthy diet," Group 2: patients not following a healthy diet). Groups were compared using the Mann-Whitney U test. Data on baseline and clinical characteristics were collected. Patients will be followed up for compliance with the healthy diet, and any changes in dietary habits will be assessed during routine follow-up visits.

RESULTS

Six patients were included from Jan 2023 to Feb 2023 (Average age 32.7, 50% adolescent, 50% male, mean BMI 27.7). The average PHQ9 score was 7, with only one patient having a score greater than 10. Two third of patients (67%) had a diagnosis of depression, while 33% had a diagnosis of ADHD and anxiety disorder, respectively. Overall, 50% of the patients were found to be following an unhealthy diet. The average PHQ9 score among those following an unhealthy diet was higher at 9.7 vs 3 however, it did not reach statistical significance (p=0.40).

CONCLUSION

There is an association between unhealthy dietary habit and mental health. Therefore, clinicians should regularly include dietary assessment as a mental health assessment.

30. Respiratory Failure Associated with Autoimmune Myositis of the Diaphragm in Primary Biliary Cirrhosis

Roy Sebastian[1*#], MD, Dan Le[1#], MS3, Vani Selvan[1], MD

[1]Department of Family Medicine, Texas Tech University Health Sciences Center – Permian Basin, Odessa, TX, USA

BACKGROUND

Primary biliary cirrhosis (PBC) is a rare autoimmune disorder characterized by chronic inflammatory destruction of intrahepatic bile ducts. While liver is the principal organ affected by PBC, other organs may be affected. Muscular involvement has also been described in 10-20% of PBC patients, majorly manifesting as muscle weakness secondary to auto-immune myositis (AIM).

CASE DESCRIPTION

Primary biliary cirrhosis (PBC) is a rare autoimmune disorder characterized by chronic inflammatory destruction of intrahepatic bile ducts. While liver is the principal organ affected by PBC, other organs may be affected. Muscular involvement has also been described in 10-20% of PBC patients, majorly manifesting as muscle weakness secondary to auto-immune myositis (AIM). Here we report the case of a 51-year-old woman with PBC, diagnosed seven years ago with recurrent hospital admissions due to diaphragmatic weakness. Myositis of the diaphragm and proximal extremity muscles secondary to AIM requiring non-invasive positive pressure ventilation. Recovery was slow and tracheostomy was recommended where the patient opted for long-term ventilation. The patient was discharged to long-term acute care.

CONCLUSION

Myositis of the diaphragm and proximal extremity muscles secondary to AIM requires non-invasive positive pressure ventilation and eventually tracheostomy. Close monitoring is required for the respiratory status.

31. Evaluating Premature Myocardial Infarction Related Mortality Rate in US-Mexico Border Underserved Area

Muhammad Waqar Sharif[1#], MD, Sulaiman Karim[2], MS3, Katrina Llorente[2], MS3, Vishaal Kondoor[2], MS3, Mayra Gomez[2], MS3, Barath Rangaswamy[1#*], MD, Stephanie Stroever[3], PhD

[1]Department of Internal Medicine, TTUHSC – Permian Basin, Odessa, Texas, USA
[2]School of Medicine, TTUHSC – Permian Basin, Odessa, Texas, USA
[3]Clinical Research Institute, TTUHSC, Lubbock, Texas, USA

BACKGROUND

The United States (US)-Mexico border is a socioeconomically underserved area. Evaluating premature MI related mortality rate by demographic and regional characteristics may inform public health interventions.

MATERIALS AND METHODS

We used the CDC WONDER (Wide-Ranging Online Data for Epidemiologic Research) database to examine premature (<65 years of age) crude mortality rates per 100,000 from 2000 to 2020 using ICD-10 codes I21, I22. Our data analysis showed that females in the border and non-border areas had the same premature mortality rate (6.9), whereas, the males from the border area had a slightly higher rate (16.9) than the non-border area (15.8). By ethnicity, Hispanic/Latinos in the border area had a higher mortality rate (11.5) than the Hispanics from non-border area (5.8). When it comes to non-Hispanics, the non-border area had higher rate (14.6) than border area (12.4). By race, the mortality rates of White and American Indian/ Alaska native were higher in the border area (12.7 and 6.8) when compared to the non-border area (11.7 and 5.5 respectively). The mortality rates of African American and Asian/pacific Islander were higher in the non-border areas (16 and 5.5) when compared to border areas (9.5 and 5.1 respectively).

RESULTS

There is considerable heterogeneity across gender, demographic groups, border and non-border areas.

CONCLUSION

Systemic public health efforts can be implemented to address cardiovascular health disparities and outcomes related to premature MI in the underserved areas of US-Mexico border.

32. MIND THE GAP or DON'T? - Pseudo Acidosis in a patient with Hypertriglyceridemia

Lutfor Nessa[1#], MD, MPH, Joud Enabi[1#], MD, Devi Suravajjala[2], MD, Barath Rangaswamy[3], MD, Vijay Eranki[4*], MD

[1]*Resident physician. Department of Internal Medicine, TTUHSC-PB, TX, USA*
[2]*Assistant Professor. Endocrinology Department, TTUHSC-PB, TX, USA*
[3]*Assistant Professor. Department of Internal Medicine, TTUHSC-PB, TX, USA*
[4]*Associate Program Director. Endocrinology Department, TTUHSC-PB, TX, USA*

BACKGROUND

Pseudo-hypobicarbonatemia can occur in the setting of hypertriglyceridemia, causing falsely low measured bicarbonate (tCO2) values due to laboratory interference. The less commonly available indirect ion-specific electrode method is unaffected by hypertriglyceridemia.

CASE DESCRIPTION

A 39-year-old female with severe hypertriglyceridemia, type 2 diabetes, and chronic pancreatitis presented with severe epigastric pain and nausea. She had no history of alcohol abuse or family history of hypertriglyceridemia. She stopped taking statins and fibrates a few months before the current hospitalization. Initial vital signs were normal, and physical exam was unremarkable, with no eruptive xanthomas. Review was negative, including metformin use. Initial labs revealed blood glucose 171 mg/dl (70-118), lipase 98 U/L (<=60), triglycerides 2314 mg/dL (<=150), tC02 10 mmol/L (20-29) and anion gap (AG) 26 mEq/L (5-12). However, arterial blood gas (ABG) analysis revealed normal bicarbonate 25.5 mEq/L, pH 7.35, PaCO2 45.2 mmHg, and PaO2 66 mmHg, indicating lab interference due to high triglycerides. Insulin infusion was started along with atorvastatin and fenofibrate in the ICU. Her triglyceride levels decreased progressively, and tCO2 levels and anion gap normalized to 25 mmol/L and 10 mEq/L, respectively.

CONCLUSION

Recognition of lipemic serum as part of a metabolic acidosis of otherwise unexplained anion gap should induce the clinician to obtain blood gas. Also, these patients can be safely treated by insulin infusion in resource-limited settings.

33. Vulvar Xanthomas in a Patient with Familial Hypercholesterolemia

Annie Gilliam[1#], DO, Robert Eke[1#], MD, Gary Ventolini[1*], MD, FACOG, FAAFP

[1]Department of Obstetrics and Gynecology, TTUHSC – Permian Basin, Odessa, Texas, USA

BACKGROUND

Xanthomas are considered as localized lipid deposits within an organ system. They may manifest as papules, plaques or nodules. It is important to correctly characterize cutaneous xanthomas because they could be idiopathic, associated with hyperlipidemia, either familial or acquired, or even a presentation of a hematological disease. We present a case of a young female patient found to have vulvar xanthomas with a medical history of familial hypercholesterolemia Type IIA upon gynecological examination of her complaints of “acne in her vagina”.

CASE DESCRIPTION

A 20-year-old-female presented to the clinic with complaints of “acne in her vagina”. She noticed small micro plaques on her vagina which increased in number and size over a few months. She denied any pain or itching in the affected area. She had previously applied acne cleansing solution, topical antibiotics and benzoyl peroxide without any improvement. The patient has a medical history of familial hypercholesterolemia type IIA. Gynecological examination revealed a dozen small yellow micro plaques ranging from 1 to 6 mm on the right side of the external border of her labia majora. A few lesions of folliculitis were also observed in her inguinal/gluteal area. She was diagnosed with vulvar xanthoma secondary to familial hypercholesterolemia and subsequently referred for CO2 laser ablation.

CONCLUSION

Vulvar xanthomas are a rare location for xanthoma manifestation. An accurate diagnosis of vulvar xanthomas is important in order to correctly rule out more serious gynecological and hematological pathologies. In the case of our patient with hyperlipidemia associated xanthomas, regular clinical follow up for associated morbidities is required.

34. A Rare Case of Spontaneous Renal Hematoma

Rahul Atodaria[1*#], MS3, Lutfor Nessa[2#], MD, MPH, Genesis Perez Del Nogal[2], MD, Barath Rangaswamy[2], MD, Sai Siva Mungara[2], MD

[1]TTUHSC School of Medicine – Permian Basin, Odessa, Texas
[2]Department of Internal Medicine, TTUHSC – Permian Basin, Odessa, Texas

BACKGROUND

We present a case of spontaneous renal hematoma (SRH) in a patient with end-stage renal disease (ESRD) on hemodialysis. Although SRH is rare in hemodialysis patients, they are predisposed to developing SRH and have a high mortality and morbidity risk. Specifically, there are about 550 published cases of SRH from 1933 to 2016 with a mortality risk between 2.3-14% depending on the etiology. Furthermore, SRH has no "standard" presentation, which makes diagnosis of high-risk patients challenging.

CASE DESCRIPTION

A 38-year-old African American male presented with nausea and diffuse abdominal pain after missing nine days of dialysis. Medical history included hypertension for 18 years and ESRD on hemodialysis for two years. Upon presentation, vital signs were normal. Physical exam was significant for dry mucous membranes, abdominal distention, generalized abdominal tenderness, and peripheral edema. Labs were significant for normocytic anemia, hyperkalemia, renal dysfunction, and anion gap metabolic acidosis. Patient was restarted on hemodialysis. CT scan abdomen/pelvis without contrast along with CT angiography were performed due to persistent abdominal pain, which revealed a poorly defined hemorrhage in the left kidney with infiltration of left perinephric fat and fluid in the left perinephric space.

CONCLUSION

Our case highlights a rare occurrence of SRH in a high-risk patient group. We encourage physicians to remain cognizant of SRH in hemodialysis patients, given the uncommon occurrence as well as the high mortality and morbidity risk.

35. Cogan's Syndrome in the Rare Setting of Sjorgen's Syndrome

Kejal Shah[1], MD, Hema Kondakindi[1], MD, Kristina Cross[2], MS3, Aimen Asim Dar[3], MD, Srikanth Mukkera[1]*, MD

[1]Department of Internal Medicine, TTUHSC – Permian Basin, Odessa, TX, USA
[2]School of Medicine, TTUHSC – Permian Basin, Odessa, TX, USA
[3]Research Volunteer, TTUHSC – Permian Basin, Odessa, TX, USA

BACKGROUND

Cogan's syndrome has been diagnosed in patients with other coexisting autoimmune diseases such as rheumatoid arthritis and inflammatory bowel disease, but the coexisting Sjogren's syndrome is rarely reported.

CASE DESCRIPTION

A 67-year-old female with a 30-year history of Raynaud's syndrome presented to the rheumatology clinic for 1.5-year-history chronic dry eyes and a history of photosensitive rash. She had a bilateral conjunctival injection and an erythematous macular rash. The patient was initially diagnosed with undifferentiated connective tissue disease and treated with hydroxychloroquine. Labs revealed positive Sjogren's syndrome A (SSA) and negative antinuclear antibodies.

A few months ago, she had visual floaters and was found to have posterior vitreous detachment and vitreous opacities on the left and was diagnosed with intermediate uveitis secondary to Lyme disease and treated with Doxycycline. She also endorsed new onset right ear sensorineural hearing loss; and was diagnosed with Sjogren's disease and Cogan's syndrome. Therapy with methotrexate and folic acid was initiated.

CONCLUSION

Cogan's syndrome manifests as interstitial keratitis and vestibulo-auditory dysfunction in the young adult population resulting in a range of symptoms. Pathogenesis includes lymphocyte and plasma cell infiltration of the spiral ligament, loss of cochlear neurons, endolymphatic hydrops, and degenerative changes in the organ of Corti, extensive new bone formation in the inner ear, demyelination, and atrophy of the vestibular and cochlear branches of the eighth cranial nerve. Due to its rarity, a degree of suspicion should be held when a patient presents with anti-SSA, uveitis, and new onset unilateral hearing loss.

36. Is Saffron Effective In the management of ADHD?

Mahwish Adnan[1]*, MD, Muhammad Saad[1], MD, Chintan Trivedi[1], MD, Bobby Jain[1], MD, MPH, MEHP

[1]Department of Psychiatry, Texas Tech University Health Science Center at Odessa/ Permian Basin, Odessa, Texas

BACKGROUND

ADHD is a common neuro-developmental disorder in 3% – 7% of school-age children.

MATERIALS AND METHODS

We performed a literature search using PubMed, EMBASE and MEDLINE.

RESULTS

The search yielded three studies relevant to the aim of this review. A 12-week, non-RCT in aged 7-17 years showed that Saffron is more effective for treating hyperactivity symptoms than methylphenidate. Also, the saffron arm showed noticeable improvement in sleep. In the second study, Children with ADHD ages 6-17 years, using methylphenidate combined with Saffron proved to be more effective than separate individual treatments. Both groups treated with methylphenidate with and without Saffron had fewer symptoms after eight weeks. However, after four weeks, the average score of the parents and teachers assigned to the methylphenidate with the saffron group was lower than the average total score in the methylphenidate group ($p < 0.05$). Finally, in a six-week study with 54 child patients, the Changes in baseline Teacher and Parent ADHD Rating Scale scores were not significantly different between the saffron group and the methylphenidate group ($p = 0.731$ and $p = 0.883$, respectively). Also, the frequency of adverse effects was similar between the saffron and methylphenidate groups.

CONCLUSION

The result shows the potential usefulness of Saffron as an adjunct treatment for ADHD. It provides evidence to support irritability and improved clinical outcomes. Future studies should include fundamental quality aspects such as power calculations, adequate sample sizes, pre-specified primary outcomes, presentation of results from the intention-to-treat analysis, and precise adherence and attrition specifications.

37. Improving Appropriate Gastrointestinal Prophylaxis in Hospitalized Patients on High Doses of Glucocorticoids at Medical Center Hospital in Odessa, TX

Alejandro Herrera[1]*, MD, Genesis Perez Del Nogal[1], MD, Laura Gonzalez[1], MD, Pablo Amador Mejia[1], MD, Muhammad Waqar Sharif[1], MD, Ashley Bane[2], PharmD, BCPS, Claudia Kelso[3], MD, MPH, Sarah Kiani[1], MBBS, APD

[1]Department of Internal Medicine, TTUHSC-Permian Basin, TX, USA
[2]Department of Pharmacy, Medical Center Hospital, Odessa, TX, USA
[3]International Medical Director at Ochsner Medical Center, New Orleans, Louisiana, USA

BACKGROUND

Glucocorticoids are widely used for various disorders. Associated side effects appear related to the average dose and cumulative duration of glucocorticoid use. The American Society of Health-System Pharmacists guidelines consider high-steroid therapy (Hydrocortisone 250mg daily or higher, or its equivalent), as minor criteria for gastrointestinal (GI) prophylaxis. GI adverse effects, including gastritis, ulcer formation, and bleeding, are increased by 2-fold in patients receiving steroids for <30 days or an equivalent total dose to <1000 mg of prednisone. Some authors recommend GI prophylaxis to patients under high doses steroids (HDS) to increase patient safety and prevent adverse GI events.

MATERIALS AND METHODS

Our multidisciplinary team implemented an electronic alert using an existing surveillance platform (Vigilanz). Patients receiving daily doses equal or higher of: prednisone 40mg, dexamethasone 6mg, hydrocortisone 160mg, and methylprednisolone 32mg were included. Pharmacy and patient safety committees used the alert to improve quality of care and patient safety. Compliance trend was studied on 9/2021-3/2022. The Vigilanz alert was applied during the last month, and the percentage of patients receiving GI prophylaxis in the setting of HDS was measured from 4/2022-10/2022.

RESULTS

A total of 7404 patients were included in the study. 4067 patients were exposed to HDS prior to the Vigilanz rule, with a compliance of 66.2% for GI prophylaxis. 3307 patients were exposed to HDS after the Vigilanz rule with a rise in compliance for GI prophylaxis to 75.2%.

CONCLUSION

Technology-based interventions integrated with electronical medical records, can improve compliance with GI prophylaxis in hospitalized patients receiving HDS.

38. Preventive Effect of Natural Light Exposure on Depressed Mood: A Hope for Bipolar Depressive Patients

Mahwish Adnan[1]*, MD, Chintan Trivedi[1], MD, MPH, Zeeshan Mansuri[2], MD, MPH, Shailesh, Jain[1], MD, MPH, MEHP

[1]Department of Psychiatry, TTUHSC – Permian Basin, Midland, Texas, USA
[2]Department of Psychiatry, Boston Children's Hospital/Harvard Medical School, Boston, MA, USA

BACKGROUND

For bipolar disorder patients, natural light exposure is being explored as a potential non-pharmacological intervention to prevent or alleviate depressive symptoms. However, there is currently a lack of research on this topic.

MATERIALS AND METHODS

We performed a literature search using PubMed, EMBASE and MEDLINE on studies evaluating effect of morning light on depressed mood in patients with bipolar disorder. From all the studies data on efficacy were obtained and summarized in this literature review.

RESULTS

Only two studies evaluated the effects of natural light exposure (NLE) among individuals with BD. First study found that longer total duration of light intensity (=1000 lux) was associated with fewer depressive symptoms in BD, with the highest tertile group of average daytime light intensity showing a significantly lower odds for the depressed state than the lowest tertile (OR, 0.33; 95%CI, 0.14-0.75; p:0.009). However, this study did not assess the long-term preventive benefits. The second study found that longer light exposure time (=1000 lux) was associated with a decreased risk of BD depression relapse (per log min; hazard ratio, 0.66; 95% CI, 0.50–0.91), and a higher illuminance and more prolonged exposure above 1000 lux in the morning significantly decreased BD relapse (per log lux and log min; hazard ratio, 0.65 and 0.61; 95% CI, 0.49–0.86 and 0.47–0.78, respectively).

CONCLUSION

Limited evidence suggests that natural light exposure may prevent or alleviate depressive symptoms in bipolar disorder. Further research is necessary to determine safety and efficacy, of natural light exposure in this population.

39. Polyarteritis Nodosa Presenting with Spontaneous Splenic Artery Aneurysmal Rupture

Hema Kondakindi[1], MD, Kejal Shah[1], MD, Joud Enabi[1], MD, Maneesh Mannem[1], MD, Srikanth Mukkera[1]*, MD

[1]Department of Internal Medicine, TTUHSC – Permian Basin, Odessa, Texas, USA

BACKGROUND

Polyarteritis Nodosa (PAN) is a connective tissue disease affecting arteries, causing aneurysmal dilatations, and in some patients, rupture. We present a case of spontaneous splenic artery aneurysmal rupture who was later diagnosed with PAN.

CASE DESCRIPTION

A 48-year-old male with history of using cocaine and methamphetamines presented with complaints of progressive generalized abdominal pain from three days. Vitals showed tachycardia, hypotension requiring pressor support despite fluid resuscitation. Physical examination revealed a distended, diffusely tender abdomen, bowel sounds were present. On laboratory work-up, he had low hemoglobin requiring multiple blood transfusions, without coagulopathy. Abdominal CT showed a 2 cm lobulated saccular aneurysm involving the splenic artery, associated with moderate hemoperitoneum with an 8.6cm hematoma secondary to aneurysmal rupture, multiple other mesenteric vessels were dilated including renal, superior mesenteric, and gastric arteries. Inflammatory markers like erythrocyte sedimentation rate and C-reactive protein were elevated, C3 and C4 were normal. IR-guided splenic artery embolization for splenic artery aneurysm was done, after which his hemoglobin remained stable. Due to the severity of PAN, he was initiated on IV steroids, cyclophosphamide therapy with a tapering dose of steroids over 6 months.

CONCLUSION

PAN can have a variable presentation, rarely like isolated abdominal pain which can be seen in 40% of patients. Unlike hepatic and renal aneurysms, splenic artery aneurysms are less common in PAN. Aneurysmal rupture has a very high mortality. Prompt diagnosis, resuscitation, and hemostasis via trans arterial embolization or surgery are essential for patient survival.

40. Gitelman Syndrome

Joud Enabi[1#*], MD, Lutfor Nessa[1#], MD, MPH, Arjan Singh[1], MD, Muhammad Waqar Sharif[1], MD, Barath Rangaswamy[1], MD, Mamoun Bashir[1], MD

[1]Department of Internal Medicine, Texas Tech University Health Sciences Center Permian Basin, TX, USA

BACKGROUND

Gitelman syndrome is a rare genetic disorder that affects the kidneys' ability to reabsorb electrolytes such as magnesium, potassium, and calcium. Symptoms of Gitelman syndrome include clinical manifestations of electrolyte disturbances.

CASE DESCRIPTION

A 23-year-old female with recurrent hypokalemia presented to the ED with sudden onset of weakness in all extremities and thirst after receiving an unknown injection and taking Cefdinir. EKG showed prolonged QT interval, and lab results showed hyperglycemia 166 (70-100 mg/dL), severe hypokalemia 1.1 (3.6-5.1 mmol/L), mild hypercalcemia 11 (8.9-10.4 mg/dL), and severe hypophosphatemia 0.6 (2.3-7.0 mg/dL).The patient had a history of hypokalemia, which was incidentally found during a previous hospitalization. She had been managed with oral KCl but stopped taking the medication. The patient was admitted to ICU, managed with potassium supplementation and half-normal saline, and discharged with oral potassium and follow-up with a nephrologist. She returned five days later with severe hypokalemia 1.3, mild hypercalcemia 10.7, and severe hypophosphatemia 0.6. A 24-hour urinary test showed distal convoluted tubulopathy indicative of Gitelman syndrome, with potassium, magnesium, sodium loss, and calcium retention. The patient was treated with potassium and magnesium replacement therapy and spironolactone and discharged with instructions to continue the supplements with spironolactone and follow up with a nephrologist.

CONCLUSION

Gitelman syndrome is caused by mutations in the SLC12A3 gene, which provides instructions for making a protein called the thiazide-sensitive sodium-chloride cotransporter. While there is no cure for Gitelman syndrome, this condition can be managed with dietary changes, and supplements help regulate electrolyte balance.

41. An Incidental Finding of Recurrent Colorectal Cancer in a Multiple Endocrine Cancer Survivor

Bolanle Bolaji[1], MD, MPH, Rahul Atodaria[1], MS3, Nimat Alam[1]*, MD

[1]Department of Family Medicine, Texas Tech Health University Health Science Center at the Permian Basin, TX, USA

BACKGROUND

Colorectal cancer is the third most frequently diagnosed cancer among United States adults. Majority of colorectal cancer cases are sporadic while familial or hereditary presentations are less common. Colorectal cancers are rarely associated with endocrine neoplasms.

CASE PRESENTATION

A 56-year-old legally blind woman presented to a hospital for bilateral hip pain. Physical examination revealed bloody stool in the rectum. Patient was then referred to our hospital for further workup of rectal bleeding. At presentation, patient was severely anemic, requiring blood transfusion. Additional history revealed she was 46 months status post resection of Stage IIc rectosigmoid colon adenocarcinoma and adjuvant chemotherapy. Surgical history was also significant for resection of non-functioning pituitary microadenoma and total thyroidectomy for papillary thyroid carcinoma 26 and 32 months prior respectively. Notably, patient had no family history of cancer or tobacco use. Post-operative imaging and colonoscopy done about one year prior to index presentation were negative for recurrence. Colonoscopy revealed a bleeding ulcerated sigmoid colon mass and no other lesion in the colon. Restaging imaging detected liver metastasis. At this point, patient had received multiple blood transfusions. Hence, the sigmoid mass was resected, and diagnosis was pT3N1aM1. The patient had no bleeding per rectum after surgery and was discharged from the hospital.

CONCLUSION

This case demonstrates a rare presentation of recurrent colorectal cancer in a patient with history of endocrine cancers. Post-operative surveillance and testing should be based on patient's factors and those with history of non-colorectal cancers may require more intensive follow up.

42. Pulmonary Embolism Due to Iron Deficiency Anemia in a Young Patient

Bosky Modi[1#], MD, Laura Gonzales-Reyes[1#*], MD, Sai Siva Mungara[1], MD, Barath Rangaswamy[1], MD

[1]Department of Internal Medicine, TTUHSC – Permian Basin, Odessa, Texas, USA

BACKGROUND

Iron deficiency is the most common cause of anemia worldwide. However, it is an under-recognized cause of venous thromboembolism (VTE).

CASE DESCRIPTION

A 28-year-old female presented with acute chest pain, shortness of breath, and palpitations. Medical history of long-standing menorrhagia. No history of use of oral contraceptives, smoking, malignancy, recent travel, or prolonged immobilization. Initial laboratories showed hemoglobin of 8.7 g/dL. D-dimer elevated at 341.6, and CT PE showed a large pulmonary thrombus within the right main pulmonary artery with extension into the right upper and middle lobes. She was found to have iron deficiency anemia (IDA). She was treated with intravenous heparin. Hypercoagulability workup returned negative, except for factor VIII level elevated at 274. She was sent home with oral anticoagulants and iron replacement therapy.

CONCLUSION

In a retrospective study, the thrombosis rate was calculated to be 7.8% in patients with IDA and 15.8% in patients with IDA and thrombocytosis. Several mechanisms have been proposed to explain the association between IDA and thrombosis, such as reactive thrombocytosis, disinhibition of megakaryocyte activity, poorly deformable microcytic red blood cells, and decreased oxygen-carrying capacity of erythrocytes. Recently, two other possible explanations have surfaced. Increased plasminogen activator inhibitor-1 in IDA causes decreased fibrinolytic activity. Another study found that low serum iron levels were associated with elevated plasma levels of coagulation factor VIII. Increased FVIII activity is a prothrombotic factor, and levels greater than 150 IU/dL (or 150% of normal) are reported to increase the risk of VTE, as found in our patient.

43. T10 Class A Ventral Spinal Epidural Hematoma in the Setting of Hypertensive Emergency

Triet Le[1], MS3, Duc Le[1], MS3, Mark Frederickson[1], [2]*, MD, Bei Zhang[1], [3], MD, John Norbury[1], [3], MD

[1]*School of Medicine, TTUHSC, Lubbock, Texas, USA*
[2]*Encompass Health, Midland, Texas, USA*
[3]*Division of Physical Medicine and Rehabilitation, Trust point Rehabilitation Hospital of Lubbock, Lubbock, Texas, USA*

BACKGROUND

Hypertensive emergency (HE) is a well-documented cause of cerebral edema and encephalopathy with associated neurological deficits. Here, we present a case of Spinal Epidural Hematoma (SEH) as an unusual complication of HE.

CASE DESCRIPTION

A 53-year-old man with histories of hypertension and ESRD presented to the ED with one week of dry cough, fatigue, headache, back pain, abdominal pain, and weakness in his legs. He missed dialysis that morning. He denied any trauma or injury. His blood pressure was 204/107. IV hydralazine and metoprolol were started. He continued to be somnolent/lethargic. He was admitted to the ICU with Cardene. Emergent dialysis was done. A day later, his weakness progressed to complete paraplegia. MRI T-spine found a ventral epidural hematoma at T10 causing thoracic cord compression with associated cord edema from T9-T11. Neurosurgery performed T9-T11 laminectomy and evacuation of the hematoma.

CONCLUSION

SEH, specifically ventral to the spinal cord, is a rare disease that has not been well-studied. Most of the cases were reported in patients on certain medications, such as anti-coagulations, or with coagulopathies and bleeding disorders. Other etiologies may include vascular malformation, neoplasms, infections, minor vertebral traumas, and idiopathic causes. In this case, lack of anti-coagulation medications, no recent trauma/injury, no signs of infection or neoplasms, HE is a probable causal factor of SEH. Due to its rare occurrence, it is crucial for clinicians to recognize the alarming signs and symptoms (e.g., back pain, abdominal pain, weakness in legs) and to explore SEH as a differential diagnosis in patients presenting with HE.

44. Management of a Large Intraluminal Thrombus in an Aneurysmal Coronary Segment with Normal Coronary Flow

Alejandro Herrera[1]*, MD, Laura Gonzales[1], MD, Carlos Felipe Matute Martinez[2], MD, Juan Fernando Toledo Martinez[3], MD, and Allan Beall[4], MD

[1]*Internal Medicine, TTUHSC-Permian Basin, Odessa, TX, USA*
[2]*Cardio Oncology cardiovascular department, New Haven, Connecticut, USA*
[3]*Universidad Católica de Honduras Nuestra Señora Reina de la Paz, Facultad de medicina y cirugia, San Pedro Sula, Honduras*
[4]*Interventional Cardiology Department, Advocate Illinois Masonic Medical Center, Chicago, Illinois, USA*

BACKGROUND

A coronary artery aneurysm (CAA) is an uncommon finding with an incidence of < 5% in adults. The presence of a large intracoronary thrombus within an CAA and a normal coronary flow is a very challenging scenario. Currently, there are no guidelines for the optimal management strategy of a large intra-coronary thrombus in an aneurysmal segment with normal flow.

CASE DESCRIPTION

A 72-year-old man presents with chest pain episodes over a one-month period. Past medical history includes myocardial infarction status post right coronary artery drug eluting stent (DES) two years prior and diabetes mellitus type 2. The vital signs were within normal limits and physical examination was unremarkable.

Initial 12-lead ECG revealed sinus tachycardia. A regadenoson nuclear stress test was performed for further risk stratification. Immediately after pharmacological stress test, he developed severe chest pain associated with diffuse ST segment depressions in the precordial leads. The patient was sent for coronary angiography (CAG) which then revealed a large intracoronary thrombus in an aneurysmal segment of the proximal LAD alongside severe diffuse multivessel disease.
Intravenous heparin and eptifibatide infusion for forty-eight hours was initiated followed by repeats CAG. Repeat angiogram showed complete resolution of the thrombus with evidence of an ulcerated plaque. This lesion underwent successful percutaneous coronary intervention with a 5.0 mm DES followed by post dilation with a 6.0.mm non-compliant balloon.

CONCLUSION

CAG remains the gold standard for the evaluation of coronary artery aneurysm. In patients with ACS due to an aneurysmal coronary artery culprit, attempt to restore flow is generally recommended.

45. Opsoclonus-Myoclonus Syndrome in a Patient with West Nile Virus Neuroinvasive Disease (WNND)

Ali Hamza Khair[1], MD, Muhammad Waqar Sharif[1], MD, Joud Enabi[1], MD, Arjan Singh[1]*, MD, Maida Faheem[1], MD, Alejandra Garcia Fernandez[1], MD, Barath Rangaswamy[1], MD

[1]Department of Internal Medicine, Texas Tech University Health Sciences Center at the Permian Basin, TX, USA

BACKGROUND

WNND can present with highly variable clinical presentations. OMS may be a feature of viral illness.

CASE DESCRIPTION

A 64-year-old male with no known co-morbidities was found by EMS lying on the floor at home. On arrival, he had altered mentation requiring transient intubation. Following extubation, patient had fluctuating mentation, with incomprehensible speech. Muscle strength and reflexes were normal, however, there were involuntary, myoclonic muscle jerks in all four extremities. His gaze was also disrupted by bursts of high frequency, conjugate ocular oscillations with multidirectional components, indicating opsoclonus. Lab work was notable for lumbar puncture revealing lymphocytosis and xanthochromia. EEG was abnormal demonstrating slow background activity. MRI brain was unremarkable.

The patient was empirically treated with ceftriaxone, vancomycin, ampicillin, and acyclovir. These agents were discontinued after detection of West Nile virus on serology. Patient had a protracted hospital stay secondary to various complications and was eventually discharged to a rehabilitation facility. The opsoclonus and myoclonus had resolved by the time of discharge, two months after admission.

CONCLUSION

West Nile virus infection can have variable presentations. 20-40% of patients develop symptoms, either of West Nile fever or West Nile neuroinvasive disease (WNND). Advancing age and immunocompromised status confer the highest risk of WNND which can present as meningitis, encephalitis, flaccid paralysis, or as a mixed picture.

Ocular manifestations, including chorioretinitis, retinal hemorrhages, and vitreitis have been reported in association with WNND. Notably however, our research encountered only 3 reported cases of West Nile virus causing opsoclonus-myoclonus syndrome (OMS).

46. Comparison between Accelerate Pheno and Microscan for the Determination of the Impact of Rapid Pathogen Identification and Sensitivity in Bacteremia

Brandon Buss[1], PharmD, Alexander Rothenberger[1]*, PharmD, BCPS

[1]Medical Center Hospital - Department of Pharmacy, TX, USA

BACKGROUND

Accelerate Pheno utilizes fluorescent in situ hybridization for rapid identification of pathogens and morpho kinetic cellular analysis with automated microscopy to determine susceptibility. Compared to the current system Microscan, this system was internally validated to reduce time to identification by 45.1 hours and time to susceptibility by 39.6 hours. The system has an overall sensitivity 94.7%, specificity 98.9%, positive predictive value (PPV) 83.7%, and negative predictive value (NPV) of 99.7%. This study is to evaluate the impact of Accelerate Pheno on clinical outcomes.

MATERIALS AND METHODS

This retrospective, observational study examined patients from January 1, 2021 to December 31, 2022 using a clinical decision support database, in addition to electronic medical records. The primary outcome is hospital length of stay and secondary outcomes evaluate ICU length of stay, time to change in therapy, and days of therapy for select antibiotic categories.

RESULTS

There were 114 patients who met inclusion and exclusion criteria from which 31 patient's samples were analyzed by Accelerate Pheno. Hospital length of stay not significantly different (12.94 vs 10.98; p=0.992). Time to change in therapy was 6.95 hours in the pre-Accelerate group and 12.85 hours in the post accelerate group (p<0.0001). The remaining secondary outcomes were non-significant.

CONCLUSION

This analysis did not reveal a reduction in hospital length of stay by implementing Accelerate Pheno. Sample size was a limitation in the current study and a repeat study with larger sample size should be performed.

47. Contextualizing the Relationship Between Social Isolation and Substance Abuse

Chintan Trivedi[1], MD, MPH, Abid Rizvi[1], MD, Rupak Desai[1], MD, Zeeshan Mansuri[2], MD, MPH, Shailesh Jain[1]*, MD, MPH, Sulaiman Karim[1], BS, Jasmin Freeborn[1], BS

[1]Department of Psychiatry, TTUHSC – Permian Basin, Odessa, Texas
[2]Boston Children's Hospital/Harvard Medical School, Boston, Massachusetts

BACKGROUND

Substance use disorder (SUD) affects over 20 million people in the US. Psychosocial factors such as loneliness and anxiety are significant risk factors for developing SUD as a means to cope with social pain. However, more research is required to better target prevention and intervention.

MATERIALS AND METHODS

The study included 2050 patients (median age: 48 years, and male: 55.6%) with a social isolation diagnostic code, of which 16.6% had SUD, with higher prevalence in younger age, male sex, and Black race; smoking (49.3% vs 36.1%), alcohol (14.4% vs 4.9%), cannabis (14.6% vs 1.4%), stimulant (16.3% vs 2.6%), and opioid-related (16.6% vs 3.1%) disorder were the most prevalent SUDs among socially isolated patients. The length of stay was similar among socially isolated patients by substance use, but hospitalization cost was higher ($6144 vs $4745) among patients with SUD.

RESULTS

The study included 2050 patients (median age: 48 years, and male: 55.6%) with a social isolation diagnostic code, of which 16.6% had SUD, with higher prevalence in younger age, male sex, and Black race; smoking (49.3% vs 36.1%), alcohol (14.4% vs 4.9%), cannabis (14.6% vs 1.4%), stimulant (16.3% vs 2.6%), and opioid-related (16.6% vs 3.1%) disorder were the most prevalent SUDs among socially isolated patients. The length of stay was similar among socially isolated patients by substance use, but hospitalization cost was higher ($6144 vs $4745) among patients with SUD.

CONCLUSION

The link between social isolation and substance use highlights the significance of addressing social isolation as a public health issue. Interventions aimed towards nurturing social ties and reducing social isolation may hold significant promise in the prevention and management of substance use disorders.

48. Improving Smoking History Documentation in the Electronic Medical Record At Our Primary Care Clinic: A Clinical Workflow Quality Improvement Project

Sailaja Devi Saragadam[1], MD, Sai Siva Mungara[1]*, MD

[1]*Department of Internal Medicine, TTUHSC, Permian Basin*

BACKGROUND

To enhance smoking history documentation in our primary care clinic by expanding current order sets in Cerner and to analyse their impact on rates of low-dose CT (computed tomography) scans ordered.

METHODS

We developed a Cerner order set for efficient smoking history documentation, including a column for non-traditional forms of nicotine intake. We educated medical staff and residents about these new changes through flyers and reminders. We analysed data from the Texas Tech University Health Science Centre primary care clinic database to compare rates of smoking documentation and low-dose CT scans ordered for lung cancer screening pre (09/21-04/22) and post-intervention (05/22-12/22). Adequate documentation included current smoking status, quantification of intake, and comments on smoking history duration, with former smokers requiring a quitting date.

RESULTS

The proportion of patient encounters with some form of smoking documentation did not significantly differ pre- and post-intervention (49.8% vs 50.1%), but adequate smoking documentation increased by 2% post-intervention. Non-traditional forms of nicotine intake, such as vaping, were also documented more frequently after the intervention (0.5% vs 1.5%). There was a 4.7% increase in low-dose lung CT scans ordered after the intervention.

CONCLUSION

Improving smoking history documentation is essential for effective lung cancer screening. Streamlining documentation through EMR order sets can efficiently provide the necessary data for initiating lung cancer screening, particularly in a busy clinic setting. This simple and cost-effective intervention has the potential to improve lung cancer screening.

49. Low-Risk Pregnancies versus High-Risk Pregnancies in a West Texas Academic Clinic

Cornelia de Riese[1]*, MD PhD MBA, Jasmin Freeborn[2], MS3, Asley Sanchez[1], BS, Kushal Gandhi[1], PhD

[1]Department of Obstetrics of Gynecology, TTUHSC – Permian Basin, Odessa, Texas, USA
[2]School of Medicine, TTUHSC – Permian Basin, Odessa, Texas, USA

BACKGROUND

Since 1987, there has been a rise in pregnancy-related morbidity and mortality despite improvements in medical diagnosis and treatment, from 7.2 deaths per 100,000 live births to 23.8. Rural areas compared to urban areas have a higher rate of pregnancy-related mortality. There is a significant gap across marginalized groups as well with non-Hispanic Black persons at an alarming rate of 41.4 fatalities per 100,000 live births. Unfortunately, there is an increasing number of pregnancies with concurrent chronic health conditions including cardiovascular disease, chronic hypertension, and metabolic diseases such as diabetes.
The purpose of this study is to quantify high-risk pregnancies in our population to generate awareness among the public and medical professionals regarding the prevalence of high-risk pregnancies in West Texas.

MATERIALS AND METHODS

A retrospective chart review was carried out to obtain information on clinic visits from September 2022 to November 2022. Using the EMR, electronic records were screened for pregnancy codes and charts were reviewed to classify patients as either low-risk or high-risk.

RESULTS

This study will include 1000 patients (between 18 and 55 years old and greater than 12 weeks pregnant). 30% of our patient population has low-risk pregnancies, whereas 70% are considered high-risk pregnancies.

CONCLUSION

Our research shows a significant population of high-risk pregnancies within West Texas. Current literature implies that the cause of increased mortality in pregnancy is still unknown; therefore, it is crucial to conduct additional research to lower the rates of maternal morbidity and mortality in pregnant persons.

50. Cytokine Profiles and Their Roles in Development of Provoked Vulvodynia: A Pilot Study

Triet Le[1#], BS, Duc Le[1#], BS, Asley Sanchez[1], BS, Kushal Gandhi[1], PhD, John Garza[2], PhD, Gary Ventolini[1*], MD, FACOG, FAAFP

[1]Department of Obstetrics and Gynecology, TTUHSC – Permian Basin, Odessa, Texas, USA
[2]Department of Mathematics, University of Texas at the Permian Basin, Odessa, Texas, USA

BACKGROUND

Our study aims to investigate the cytokine profiles of vaginal swab samples from patients with provoked, localized vulvodynia (PVD) to better understand the proposed theory of inflammation caused by cytokine release from microbiomes as a potential etiology of PVD.

MATERIALS AND METHODS

Vaginal swab samples were collected for both the study group with PVD (n=23) and the control group (n=18). Cytokine concentrations were measured using MESO QuickPlex SQ 120 instrument with 5 different multiplex assays.

RESULTS

Three cytokines were significantly lower in the PV group: IP-10 (d = -0.513, p = 0.029*), IL-1RA (d = -0.399, p = 0.030*), IL-12 (d = -0.389, p = 0.034*). One cytokine was significantly higher in the PV group: IL-6 (d =+0.357, p = 0.037*).

Our study observed significant differences in concentrations of IP-10, IL-1RA, IL-12, and IL-6 between the study and control groups. However, the lack of consistency in the elevation of inflammatory profiles does not support persistent inflammation as the etiology of PVD. Nonetheless, these findings suggest that some patients with PVD may have immune response deficiencies.

CONCLUSION

The similarity between the cytokine profile of our study and that of individuals with chronic yeast infection further supports this proposed mechanism of PVD. However, due to limitations in sample size and external validity, we cannot conclude that there is an association between PVD and chronic yeast infection. Future studies involving a comprehensive history and testing for yeast infection are necessary to further explore this possibility.

51. A Case of Idiopathic Intracranial Hypertension in Pregnancy

Taelah Wooten, DO[1]*

[1]*Department of Obstetrics and Gynecology, TTUHSC – Permian Basin, Odessa, Texas, USA*

BACKGROUND

Idiopathic intracranial hypertension (IIH) is a syndrome characterized by increased intracranial pressure without an underlying cause. Majority of cases occur in obese women of childbearing age with a prevalence of 5-8% in pregnancy. IIH typically presents as headaches, transient visual disturbances and diplopia. Treatment options include weight loss, medical management and surgical for severe or refractory cases. If left untreated, severe cases of IIH with visual disturbances can progress to permanent vision loss.

CASE DESCRIPTION

27-year-old female G1P0 at 25w5d with 2 weeks of headaches, blurred and double vision worse in left eye. She was referred to the ER for neurologic evaluation by ophthalmologist who noted bilateral papilledema and left 6th nerve palsy. MRI negative with lumbar puncture with elevated opening pressure ~300mmHg. Patient diagnosed with IIH and neurology recommended start of steroids for 2 weeks.

CONCLUSION

Management of IIH in pregnancy is similar to the general population. Patients presenting with headaches, transient visual disturbances and diplopia need immediate referral for ophthalmology evaluation. Imaging is also necessary to rule out space occupying lesions as other causes of symptoms. Finally, lumbar puncture, which may be challenging in pregnancy, should not be overlooked as infectious causes should be ruled out and a high opening pressure is diagnostic of IIH. Treatment options in pregnancy are similar to the general population. However, shared decision making should be undertaken by a multidisciplinary team for adequate and prompt treatment to prevent the progression to permanent vision loss.

52. Isolated Tubal Torsion in Adolescent Female: A Case Report

Maricela E. Chavez[1], MD, MS, Kathryn Hutton[1]*, DO

[1]Department of Obstetrics and Gynecology, TTUHSC – Permian Basin, Odessa Texas, USA

BACKGROUND

The differential diagnosis for acute abdominal pain in adolescent females can be extensive. A rare cause of acute abdominal pain is isolated tubal torsion, which can have lifelong consequences if misdiagnosed. The estimated prevalence is 1 in 1.5 million women and very rare in pediatric cases. Torsion of the fallopian tube can lead to a disruption of the blood supply of the fallopian tube causing tubal edema and ischemia. The usual presentation shares symptoms with ovarian torsion: abdominal or pelvic pain which may be associated with fever, nausea, or vomiting. And similar to ovarian torsion if left untreated can lead to necrosis and the need for surgical removal which could affect fertility in the future.

CASE DESCRIPTION

11 yo postmenarchal female presented to the ER with a one-day history of worsening abdominal pain in the right lower quadrant, nausea and vomiting. The patient was afebrile with stable vital signs and normal laboratory studies. CT was performed and noted right adnexal mass. Transabdominal ultrasound was performed and demonstrated the 6cm adnexal cyst adjacent to a normal right ovary with vascular flow. Decision was made to proceed with diagnostic laparoscopy. Findings of surgery demonstrated isolated tubal torsion with edematous/necrotic right fallopian tube. Right salpingectomy was performed. Patient did well in postoperative period and was discharged on postoperative day 2.

CONCLUSION

Isolated tubal torsion is a gynecologic emergency. Should be considered as diagnosis of acute abdominal pain in female adolescents. Timely diagnosis is key to prevent any lifetime sequela including salpingectomy of affected fallopian tube.

53. Durvalumab Induced Vasculitis in a Patient with Gall Bladder Carcinoma

Shreya Uppala[1], BS, Divya Parepalli[1]*, MD, Manny Mangat[1], MD, Barath Rangaswamy[1], MD

[1]Department of Internal Medicine, TTUHSC – Permian Basin, Odessa, Texas

BACKGROUND

Durvalumab is a monoclonal antibody generally used as immunotherapy in combination with chemotherapy in order to improve clinical outcomes. It works by blocking the programmed cell death ligand 1 (PD-L1) on cancer cells, which then leads to a more robust immune response by T cells. Recent studies have shown that administering Durvalumab in conjunction with Gemcitabine and Cisplatin for advanced biliary tree cancer has significantly raised overall survival rates. Despite success in treatment of biliary tree cancers, immune related side effects can occur, including pneumonitis, colitis, uveitis, and vasculitis.

CASE DESCRIPTION

62-year-old African American female with a past medical history of hypertension and GERD initially presented with recurrent upper quadrant abdominal pain. Upon full work up, MRCP revealed innumerable hepatic masses and a partially necrotic gallbladder that was concerning for the primary neoplasm. The patient later developed DVT and PE and received treatment before starting Durvalumab, Gemcitabine, and Cisplatin therapy for metastatic adenocarcinoma of the gallbladder. About one month later, she was hospitalized for discoloration of multiple toes on both feet. After the exclusion of peripheral vascular disease and thromboembolism, she was started on prednisone 60mg per day for suspected immunotherapy induced vasculitis.

CONCLUSION

Durvalumab has efficacy as part of treatment for biliary tract cancers, however side effects following administration includes immunotherapy induced vasculitis as seen in this patient. It is imperative to understand the possible outcomes when administering this immunotherapy so that treatment with steroids, such as prednisone, can be started immediately to delay further progression of the vasculitis.

54. Case Report: Dermatologic Complications of COVID-19 Infection

Shakira Meltan[1]*, MS-3, Nimat Alam[1], MD

[1]*Texas Tech University Health Sciences Center – Permian Basin, Midland, TX, USA*

BACKGROUND

When we think of COVID-19 infections, we usually think of the virus's ear, nose, throat, and pulmonary manifestations. COVID-19, on the other hand, has been linked to an increase in various hair and skin conditions. It is unclear if these cutaneous symptoms of COVID-19 are produced by the virus or result from the infection's physical and psychological stress and anxiety.

CASE DESCRIPTION

An 8-year-old African American girl arrived at the clinic with her father to be evaluated for a rash. The rash is located on her face and parts of her arm. The patient was diagnosed with COVID-19 approximately two weeks ago and recovered without any major implications. The rash appeared a week after the COVID-19 infection around the mouth and now covers her entire face. The patient states that the lesions are mildly pruritic. This rash resembles the cutaneous manifestation of scarlet fever and has a sandpaper texture. However, unlike scarlet fever rash, it does not have the accompanying erythema and is non-blanching. This rash is accompanied by a dry and scaly lesion around her mouth.

CONCLUSION

Unlike other viruses, COVID-19 does not have a unique exanthem, and it has not associated with a specific skin condition. COVID-19 patients seem to experience several cutaneous signs, none of which are unique or diagnostic. The number of COVID-19 patients exhibiting these cutaneous symptoms is unclear. Even though we know how the virus uses ACE2 receptors in keratinocytes, the etiology of these cutaneous manifestations remains unknown.

55. Medical Education Innovation Initiative – Improving Student SHELF Scores by Longitudinal Plan

Barath Rangaswamy[1#*], MD, Srikanth Mukkera[1], MD, Patrice S. Lamey[2#], MS3, Shakira Meltan[2], MS3, Stephanie Stroever[3], PhD

[1]Department of Internal Medicine, TTUHSC – Permian Basin, Odessa, Texas, USA
[2]School of Medicine, TTUHSC – Permian Basin, Odessa, Texas, USA
[3]Clinical Research Institute, TTUHSC, Lubbock, Texas, USA

BACKGROUND

There is evidence that performance on Internal Medicine Clerkship exams (SHELF) is associated with Step 2 CK scores.

MATERIALS AND METHODS

We used a cross sectional survey of MS3 &MS4 for descriptive statistics to summarize the results and Fisher's Exact test to assess differences between cohorts. $P < 0.05$ was set a priori for hypothesis testing..

CONCLUSION

Response rate was 60% (n=27). 44% reported that time is the primary barrier for completing Q bank. Burnout and complex clinical concepts were barriers for 37.0% and 14.8%. For 3.70%, it was simply a boring task to do. Almost all participants responded that a longitudinal focus in learning the Q banks from week one of clerkship is preferred over the last week just before the exam. Half of the MS3 neither agreed nor disagreed that regular meetings with faculty to review Q bank progress would be valuable while only 1 MS4 was neutral. 30.8% of MS4 strongly disagreed that this practice would be valuable, none of the MS3 had a similar endorsement. Equal proportion of MS3 and 4 positively endorsed this practice. This was the only question with significant differences between MS3 and MS4 ($p = 0.012$). 50% preferred weekly meetings with faculty while 30% preferred biweekly. 55% agreed that the longitudinal learning plan (LLP) helped to improve their SHELF scores.

CONCLUSION

LLP is a tool that can be used to improve SHELF scores. LLP meetings help to coach students on best practices and apply mitigation strategies for barriers to practice questions and provide necessary encouragement and motivation.

56. Comparing Outcomes of 7 Days or Less vs. Over 7 Days of Antibiotic: Therapy on Hospital Acquired Pneumonia

Miguel Rivera[1]*, PharmD, Adewale Balogun[1], PharmD, Cheryl Go[1], PharmD, Barath Rangaswamy[2], MD, Nimat Alam[3], MD

[1]Department of Pharmacy, Medical Center Hospital, Odessa, Texas, USA
[2]Department of Internal Medicine, TTUHSC – Permian Basin, Odessa, Texas, USA
[3]Department of Family Medicine, TTUHSC – Permian Basin, Odessa, Texas, USA

BACKGROUND

Hospital-acquired pneumonia (HAP) is a serious and prevalent condition with an estimated rate of 3.63 per 1,000 patient days and a mortality rate ranging from 33% to 50%. While many studies and guidelines focus on ventilator-acquired pneumonia (VAP), there is a growing need for proper antibiotic de-escalation in the treatment of HAP due to the increasing prevalence of antibiotic resistance in hospital settings. However, approximating appropriate treatment time for HAP using VAP studies can lead to over or under treatment, which can increase morbidity and mortality. This study aims to elucidate into the appropriate treatment duration by exploring LOS, all-cause mortality and readmission rates.

MATERIALS AND METHODS

This retrospective, observational study examined patients between March 1, 2022, to March 1, 2023, using Vigilanz clinical decision support database, in addition to electronic medical records. The primary outcome was assessed as incidence of all-cause mortality, secondary outcomes were readmission rates and differences in labs used to determine treatment success.

RESULTS

A total of 121 patients met inclusion criteria. 80 patients in <7 days and 41 in >7 days. The odds ratio in the primary outcome was 0.6933 p=0.247 [CI 0.243, 1.981] with a relative risk of 0.732143 p=0.246 [CI 0.301, 1.782], a risk reduction of 5.12% [CI -5.91%, 16.16%], and number needed to treat 19.5.

CONCLUSION

It appears that there is a decreased risk of death in those that are getting 7 days or less of antibiotic therapy. Multicenter retrospective studies and RCT's need to be done to collaborate these results.

57. Delayed Presentation of Osmotic Demyelination Syndrome Treated with Plasmapheresis

Arjan Singh[1#], MD, Roman Karkee[1#], MD, Raksha Venkatesan* , MD, Muhammad Waqar Sharif[1], MD, Joud Enabi[1], MD, Barath Rangaswamy[1], MD, Raghavendra Sanivarapu[1]*, MD, Maida Faheem[1], MD

[1]Department of Internal Medicine, TTUHSC – Permian Basin, Odessa, Texas, USA

BACKGROUND

Osmotic Demyelination Syndrome (ODS) is a rare condition with an estimated prevalence of 0.25% to 0.5% in a general population? The importance of discussing the prevention and treatment of ODS comes from the fact that there is paucity of studies on epidemiology and standardized treatment guidelines.

CASE DESCRIPTION

A 42-year-old male with a history of chronic alcoholism presented to ED with a 3-day history of recurrent falls and choking spells. Fourteen days prior, he was admitted for severe hyponatremia (Na 97 mEq/L). After optimal sodium correction of <8-10 meq/L/day, the patient was discharged without neurological deficit and a serum Na of 131 mEq/L, and serum osmolality of 270 mOsm/kg.

This time, he was admitted to ICU for aspiration pneumonia requiring endotracheal intubation. Off sedation, neurological assessment showed left gaze preference and quadriparesis. Labs revealed Na 134 mEq/L and serum osmolality of 293 mOsm/kg. Initial MRI brain was remarkable for acute central pontine myelinolysis without mass effect. Subsequent MRI brain showed lesions with mass effect.

After five sessions of plasmapheresis (PP), the patient showed progressive improvement in motor function. Later, was discharged on tracheostomy to a long-term facility where he was successfully decannulated and was able to ambulate, currently undergoing physical therapy.

CONCLUSION

With this report, we conclude that ODS should be anticipated in severely hyponatremic patients even with optimal sodium correction. We highlight the potential role of plasmapheresis in treatment of ODS.

58. Posterior Reversible Encephalopathy Syndrome in the Background of a Patient with Lupus Nephritis on Mycophenolate Mofetil

Hema Kondakindi[1], MD, Kejal Shah[1], MD, Joud Enabi[1], MD, Barath Rangaswamy[1], MD, Srikanth Mukkera[1], MD, Asif Ansari[2]*, MD

[1]Department of Internal Medicine, TTUHSC – Permian Basin, Odessa, TX, USA
[2]Department of Nephrology, TTUHSC – Permian Basin, Odessa, TX, USA

BACKGROUND

Posterior reversible encephalopathy syndrome (PRES) is a rare neurological entity characterized by headache, nausea, vomiting, seizures. We present a case of a 25-year-old female with lupus nephritis presenting as PRES.

CASE DESCRIPTION

A 25-year-old female with history of SLE, lupus nephritis class V, CKD stage 3 and migraine presented with complaints of headache, nausea, and vomiting from 1 week. Patient was taking hydroxychloroquine, tacrolimus, mycophenolate mofetil. Vitals: heart rate 122 beats per minute; blood pressure 214/148 mm Hg. Labs were significant for hemoglobin 8.4 g/dl, creatinine 3.4 mg/dl with a baseline of 1.8 mg/dl, Pro BNP of 122,000 pg/ml. X-ray of chest showed bilateral interstitial infiltrates. CT brain showed new hypoattenuation in right cerebellum. Patient was started on Nicardipine drip. As blood pressure improved, she was transitioned to amlodipine, carvedilol. MRI brain showed vasogenic edema in the inferior cerebellum and medulla, T2/Flair hyperintensity in the subcortical region, and periventricular white matter suggestive of PRES. Mycophenolate was discontinued. Patient had positive ANA, anti-Hep 2, anti-DS DNA, and anti-SSB antibodies. C3, C4, were normal. Echocardiogram showed mild global hypokinesis of the left ventricle, grade 2 diastolic dysfunction, ejection fraction of 40%. Patient was given pulse-dose steroids for 3 days, followed by 1 dose Rituximab. As her clinical symptoms improved, she was discharged on prednisone and hydroxychloroquine. Patient was advised to see a rheumatologist and a nephrologist on an outpatient basis.

CONCLUSION

PRES can rarely occur with Mycophenolate. Physicians should be aware of the causes of PRES, because it is reversible.

59. Mental Health in the Elderly: A Study of Octogenarians with Psychiatric Disorders in Inpatient Hospitals

Chintan Trivedi[1]*, MD, Kaushal Shah[2], MD, Muhammad Saad[1], MD, Karrar Husain[1], MD, Darshini Vora[1], MD, Zeeshan Mansuri[3], MD, Shailesh Jain[1], MD, MPH, MEHP

[1]Department of Psychiatry, TTUHSC – Permian Basin, Midland, Texas, USA
[2]Department of Psychiatry, Wake Forest Baptist Medical Center, Winston-Salem, North Carolina, USA
[3]Boston Children's Hospital/Harvard Medical School, Boston, Massachusetts, USA

BACKGROUND

Older adults often face challenges such as medical comorbidities, cognitive impairment, and social isolation that can negatively impact their mental health. However, psychiatric conditions are rarely screened for. Our study aimed to assess psychiatric disorder prevalence in octogenarian inpatient hospitalizations and its impact on hospital stay.

MATERIALS AND METHODS

We employed the National Inpatient Sample dataset to examine the octogenarian population (aged 80-89). We created variables for various psychiatric disorders, including anxiety disorders, mood disorders, psychosis, adjustment disorders, and personality disorder. Additionally, we developed a composite variable to assess psychiatric comorbidity. We calculated prevalence of psychiatric comorbidities, and compared the total length of stay and between patients with and without psychiatric comorbidities.

RESULTS

Our study included a total of 2,235,911 patients (average age of 84.2 years, 57.2% female, and 79% White race). The most prevalent psychiatric disorders among the patient population were mood disorders (12.6%) and anxiety disorders (10.9%). Within mood disorders, major depression was the most common (11.8%), and unspecified anxiety disorders were the most common within anxiety disorders (10.5%). Other psychiatric disorders were present in less than 1% of the population. Patients with psychiatric comorbidities had a longer hospital stay compared to those without (5.66 vs. 5.04 days).

CONCLUSION

Our study highlights the importance for healthcare providers and policymakers to recognize the prevalence and impact of psychiatric disorders among this population. It is crucial to develop effective strategies to ensure that patients receive the appropriate care needed, which can ultimately reduce the overall healthcare burden on the population.

60. The Power of Search Trends: Examining National Suicide Prevention Week Awareness

Chintan Trivedi[1]*, MD, MPH, Shakira Meltan[1], BS, Timothy Chao[1], MD, Darshini Vora[1], MD, Shailesh Jain[1], MD, MPH, MEHP

[1]Department of Psychiatry, TTUHSC – Permian Basin, Odessa, Texas, USA

BACKGROUND

We celebrate national Suicide Prevention Week every year in September with an aim to inform the public about suicide prevention and warning signs of suicide. However, what is the impact of this month on the general population is not known. The Google trends show how frequently web search has been performed for particular search-term, which provide relative information about people's interest. Our objective was to evaluate public interest in preventing suicide by analyzing the google trends of the "Suicide Prevention" search term.

MATERIALS AND METHODS

We estimated the interest of the people in such topics during the last decade by running the google trends data from the last 10 years by applying the following filter [Search-Term: "Suicide Prevention", Locations: "United States" and Time Ranges "Jan 2013-Feb 2023"].

RESULTS

Throughout the specified period, the term "Suicide Prevention" garnered the highest search volume in September, which happens to be National Suicide Prevention month. However, in all other months, public interest in "suicide prevention" remained relatively low and fluctuating. Except for September, individuals only exhibited interest in "suicide prevention" when there was media coverage of suicide incidents, such as celebrity suicides (e.g., Anthony Bourdain) or television programs centered around suicide (e.g., 13 Reasons Why).

CONCLUSION

The results might not be definitive, but it certainly provides the approximate idea that National Suicide Prevention week affects population interest. Based on the results, there is not enough public interest in other months, there should be frequent efforts to spread suicide prevention awareness.

61. Migration of a Contraceptive Sub-Dermal Device into the Lung

Joud Enabi[1]*, MD, Alejandro J. Herrera-Ramos[1], MD, Rami Al-Ayyubi[1], MD, Pablo Amador Mejia[1], MD, Deepika Devalla[2], MD

[1]Department of Internal Medicine, Texas Tech University Health Sciences Center – Permian Basin, Odessa, TX, USA
[2]Midland Memorial Hospital, Midland, TX, USA

BACKGROUND

Significant migration of a subdermal contraceptive implant over 2 cm is rare and occurs primarily caudally from the insertion site. The implant should be palpable throughout the use and can be detected on X-ray and CT imaging. If unable to palpate the device, use ultrasound, X-ray, and CT imaging to localize the implant. Our case supports the approach of such rare complications by minimally invasive interventional radiology approach rather than the surgical approach.

CASE DESCRIPTION

A 38-year-old woman had an Implanon subdermal contraceptive implant inserted in her left upper limb. During her annual visit, the implant was not palpable. An X-Ray of the left arm was performed, and it failed to detect the implant; thus, she underwent a chest X-ray, and a linear foreign body projected in the region of the left lower lobe was found. The findings were highly suspicious for an embolized implant. Computerized tomography of the chest reported a 4 cm long linear hyper density in the left lower lobe favoring to be a migrated implant in a subsegmental pulmonary artery branch. Interventional radiology retrieved the Implanon implant through an endovascular approach to the pulmonary artery using a right common femoral vein access. The patient was discharged without complications.

CONCLUSION

Subdermal implants can carry a risk of migrating within a small range, usually less than 2 cm from the insertion sites, yet, significant migration over 2 cm is rare. Nevertheless, physicians should be aware of this possibility and the modalities that can be used to localize and retrieve the migrated implant.

62. Late Onset Neonatal Sepsis

Roy Sebastian[1*#], MD, Vani Selvan[1#], MD

[1]*Department of Family Medicine, Texas Tech University Health Sciences Center – Permian Basin, Odessa, TX, USA*

BACKGROUND

Late-onset neonatal sepsis (LONS) can occur at any time after three days of life of the newborn (LNB). The incidence rate is 20-38% and common among the pre-term than the full-term infants. Usually occurs within the first 120 days with the peak incidence between the 10th and 22nd day of the LNB. The cerebral lesions and neurosensory sequelae are the significant complications of LONS and with the mortality rate of 13-19%. The definitive diagnosis is by blood culture, coagulase-negative staphylococci (CONS) being the predominant pathogen.

CASE DESCRIPTION

We present a case of LONS in a three-week-old early-term male child born vaginally without complications. Pregnancy complicated by preeclampsia and intrahepatic cholestasis of pregnancy. Group B Streptococcus (GBS) was negative. Physical examination and diagnostic test findings of the infant were consistent with sepsis. Blood culture was positive for GBS. The patient recovered completely without any sequelae by intravenous fluid resuscitation and antibiotic therapy.

CONCLUSION

Early diagnosis of LOS contributes to improved neonatal prognosis and minimizing the sequelae.

63. Streptococcus Anginosus Lung Abscess with Complicated Parapneumonic Empyema

Laura Gonzalez[1], MD, Luftor Nessa[1]*, MD, MPH, Raghavendra Sanivarapu[2], MD, Barath Rangaswamy[3], MD, FACP

[1]Department of Internal Medicine, Texas Tech University Health Sciences Center Permian Basin, TX, USA
[2]Assistant Professor - Pulmonary Critical Care, Texas Tech University Health Sciences Center Permian Basin, TX, USA
[3]Assistant Professor of Internal Medicine, Texas Tech University Health Sciences Center Permian Basin, TX, USA

BACKGROUND

Streptococcus anginosus group (SAG) is usually characterized as a colonizer of the oropharynx. Its members have recently been linked with abscess formation.

CASE DESCRIPTION

A 55-year-old female was transferred to our hospital for pneumonia. She complained of progressive shortness of breath and right pleuritic chest pain. On admission, she was febrile, hypoxic, and tachycardic. CT chest demonstrated near complete opacification of the right lung, cavitation with fluid level in the right middle lobe, and moderate to large effusion. Sputum culture positive for MRSA. A chest tube was placed into the right pleural space; fluid grew SAG bacteria. Intrapleural fibrinolysis was performed twice, and repeated CT chest showed multiloculated right-sided empyema. Right thoracotomy and decortication were performed with clinical improvement.

Members of the SAG are facultative anaerobic colonizers of the upper airways, very rarely pathogenic. It is thought that they have the ability to release a toxin with leukocidin effect. This group can extend beyond fascial planes and interlobar fissures. Lung abscesses that develop from necrotizing pneumonia communicate with the airway, undergo auto-drainage, and usually only require antibiotics. But due to the SAG's ability to cross fascial planes, the lung abscess is often complicated by empyema due to its rupture into the pleural cavity. In these patients, antibiotic therapy often fails and requires surgical intervention. The typical treatment for these infections is ampicillin or vancomycin plus drainage of any concomitant abscess.

CONCLUSION

Individual cultures and sensitivities are essential to successfully tailor the treatment in cases of lung abscesses, either for medical or operative management.

64. If there is One, There are Two: A Case of Addison's Disease Presenting as an Adrenal Crisis in a Patient with Autoimmune Primary Ovary Insufficiency

Pedro Rojas[1]*, MD, Devi Suravajjala[1], MD, Barath Rangaswamy[1], MD

[1]*Department of Internal Medicine, TTUHSC – Permian Basin, Odessa, Texas, USA*

BACKGROUND

Adrenal insufficiency (AI) is a common condition with multiple causes that can be divided into primary (adrenal), secondary (pituitary), and tertiary (hypothalamus) forms. Addison's Disease (AD), a form of primary A, is strongly associated with autoimmune primary ovary insufficiency (POI). Usually POI precedes AD by 8–14 years. Unfortunately, many patients with adrenal insufficiency are not diagnosed before a life-threatening adrenal crisis develops.

CASE DESCRIPTION

A 57-year-old Caucasian female diagnosed with autoimmune POI at age 25 years old was experiencing fatigue, nausea, vomiting, anorexia and skin darkening for the past 5 years. On 12/2022 patient was hospitalized due to shock requiring intubation. Again, on 01/2023 patient went back to the Hospital due to dizziness, fatigue, weakness, nausea and uncontrolled vomiting. Patient reported adrenocorticotropic hormone (ACTH) stimulation test with cosymtropin and 24-hour urine cortisol were done, with subsequent diagnose of AI on 02/2023. Patient symptoms improved after hydrocortisone 10 mg twice daily and fludrocortisone 0.1 mg daily were given. She was discharged home and then followed up with Endocrinology clinic where she tested positive for anti-21-*hydroxylase* auto-*antibodies (21-OH Abs)*, consistent with a diagnosis of AD. Outside records from hospital stay are still pending.

CONCLUSION

Adrenal autoimmune disorders are the second most common disorders associated with POI. Measurement of 21-OH Abs in patients with autoimmune POI is important in identifying patients at risk of developing overt AD. Therefore, physicians must be educated to recognize adrenal insufficiency earlier so that a diagnosis can be made before a crisis develops.

65. Incidental Finding of Extra-Ovarian Granulosa Cell Tumor During Hysterectomy

Sabrina Leung[1#], MD, Traci Bartkus[1#*], DO, Michael Galloway[1], DO

[1]*Department of Obstetrics and Gynecology, TTUHSC – Permian Basin, Odessa, Texas, USA*

BACKGROUND

Granulosa cell tumors comprise 2-5% of all ovarian malignant neoplasms. Extra-ovarian granulosa cell tumors are extremely rare, described in fewer than 20 published case reports. In these case reports, nearly all patients that were ultimately diagnosed with extra-ovarian granulosa cell tumor were found to have masses greater than 7 cm in largest diameter on imaging and underwent surgical intervention primarily for excision and pathologic evaluation of these masses. Incidental finding of a relatively small (less than 5 cm) extra-ovarian granulosa cell tumor during hysterectomy performed for benign indications has not been described.

CASE DESCRIPTION

A 40-year-old female, G3P1113, initially presented for scheduled robotic-assisted total laparoscopic hysterectomy and bilateral salpingectomy secondary to fibroid uterus and chronic pelvic pain. During the procedure, an irregular left adnexal solid mass approximately 4 cm in size was incidentally identified. The mass was noted to be separate from and immediately lateral to the normal-appearing left ovary. The mass was excised along with the left Fallopian tube segment. Histopathological evaluation of the mass confirmed diagnosis of extra-ovarian granulosa cell tumor. The patient subsequently underwent laparoscopic bilateral oophorectomy and peritoneal washings, with no evidence of malignancy on pathologic or cytologic evaluation.

CONCLUSION

Due to early incidental diagnosis and intervention, the patient has not needed additional treatment with chemotherapy or radiation. She will receive close surveillance in Gynecologic Oncology clinic for early detection of recurrence. If she had not undergone hysterectomy for a benign indication, the granulosa cell tumor may not have been identified until a much later stage.

66. Moyamoya Disease Presents with Stroke Symptoms and New-onset Headache

Roy Sebastian[1*#], MD, Imran Ahmed[1#], MD, Vani Selvan[1], MD

[1]*Department of Family Medicine, Texas Tech University Health Sciences Center – Permian Basin, Odessa, TX, USA*

BACKGROUND

Moyamoya disease (MMD) is a rare, chronic vaso-occlusive disease involving the terminal portion of the intracranial internal carotid artery. A delay in the diagnosis of Moyamoya disease could lead to a devastating cerebrovascular outcome. Conditions to consider in the differential diagnosis of causes of or associations with moyamoya syndrome include homocystinuria, homocysteinemia, syndrome of mitochondrial encephalomyopathy, lactic acidosis, and stroke-like episodes (MELAS).

CASE DESCRIPTION

We report a case of a 47-year-old Hispanic male with a history of prior stroke with residual dysarthria, residual mild right-sided weakness, migraine headaches, hypertension, and Type II Diabetes Mellitus. He presented to the emergency department with a new-onset headache and left-sided numbness and heaviness. On examination, his Glasgow Coma Scale score was 15 and NIH Stroke Scale (NIHSS) was 1. Perception to touch decreased on the left lower extremity, and right lower extremity drift, which he reported as his baseline, otherwise his left motor function appeared intact. CTA Head scan revealed bilateral high-grade stenosis of the supraclinoid internal carotid arteries as well as the A1 and M1 segments bilateral, right worse than left. The presence of calcified atherosclerotic plaque indicated this was atherosclerotic in nature. Diagnostic studies coupled with the clinical presentation were compatible with a diagnosis of MMD.

CONCLUSION

There is no curative treatment for Moyamoya. However, supportive management may reduce the risk of complications, and imaging surveillance can help to identify patients who are at the highest risk for future ischemic and hemorrhagic complications and would benefit from surgical revascularization.

67. An Isolated Saddle Nose Deformity in Patient with Granulomatosis with Polyangiitis (GPA)

Joud Enabi[1#*], MD, Samhitha Gonuguntla[1], MD, Muhammad Waqar Sharif[1#], MD, Kejal Shah[1], MD, Bosky Modi[1], MD, Barath Rangaswamy[1], MD

[1]Department of Internal Medicine, Texas Tech University Health Sciences Center – Permian Basin, Odessa, TX, USA

BACKGROUND

Granulomatosis with polyangiitis (GPA) is a rare autoimmune-mediated vasculitis that mainly affects small blood vessels and has systemic clinical manifestations. 80%-95% of patients with GPA have the risk of developing head and neck manifestations, mainly presenting with otorhinolaryngological signs and symptoms. GPA can be either limited or diffused. Limited GPA affects only the head and neck region. On the other hand, generalized GPA is characterized by systemic involvement, including fever, weakness, renal and pulmonary systems involvement.

CASE DESCRIPTION

A 68-year-old female with a medical history of chronic sinusitis and hypertension noticed a new onset deformity of her nose while getting a CPAP mask fitter for a sleep study test. She visited Otorhinolaryngology, where she was diagnosed with acquired saddle nose deformity and was referred to Rheumatology for that. She had no symptoms of cough, wheezing, shortness of breath, joint pain, or blood in the urine. Antineutrophil cytoplasmic antibodies (ANCA) (1:80), myeloperoxidase, and Antinuclear antibodies (ANA) with speckled pattern were positive in her laboratory results. Anti-MPO, however, was negative. CT scan on sinuses was normal. Nasal septal cartilage biopsy showed 'necrobiotic chronic inflammation, focal vasculitis, and fibrotic scar,' consistent with granulomatosis with polyangiitis. Methotrexate and folic acid treatment were started.

CONCLUSION

GPA is a rare autoimmune-mediated vasculitis that affects small blood vessels. It has systemic clinical manifestations, mainly affecting the kidneys and the upper and lower respiratory tracts. The pathophysiology of GPA remains largely unknown, but it is believed to be an autoimmune process triggered by environmental factors in patients with genetic susceptibility.

68. Positive Impact of Dedicated Half-day Clinic on Ambulatory Care Residency Training

Roman Karkee[1*#], MD, Hassan Khalid[1], MD, Genesis Perez Del Nogal[1#], MD, Sarah Kiani[1#], MD, Arjan Singh[1], MD, Casie Reyes[2], BSBA

[1]Department of Internal Medicine. TTUHSC, Permian Basin.
[2]Department of Business Analytics & Reporting. TTUHSC, Permian Basin.

BACKGROUND

Various models of continuity clinics have been studied for effective primary care experience during residency training. The traditional half-day per week clinic model was deemed inefficient, due to conflicting outpatient and inpatient responsibilities. Continuity of care has been recognized as a limitation of the block clinic schedule. Objective: Improve internal medicine residents' continuity clinic experience

MATERIALS AND METHODS

Total number of patients seen (productivity), number of patients able to follow up with the same provider (patient continuity), number of residents with the opportunity to attend continuity clinics (resident ambulatory care exposure); and number of residents able to see the same patient again in the clinic (resident learning through continuity) was studied across resident clinics in the first quarter of the academic year in 2022 and 2021.

RESULTS

In 2022, in comparison to 2021, clinic productivity decreased by 1.9% (624 from 636 patients); patient continuity increased by 52% (48 from 23 patients); resident ambulatory care exposure increased by 18.9% (37 from 30); and resident learning through continuity increased by 65.3% (26 from 9).

CONCLUSION

The simplicity of the traditional continuity clinic schedule increases the feasibility of its implementation for ambulatory care residency training. It also facilitates better learning through continuity of patient care.

69. A Mysterious Case of Cavitary Lung Lesion in a Healthy Young Male

Lutfor Nessa[1#], MD, MPH, Kristina Cross[2#], MS[3], Sai Siva Mungara[1], MD, Barath Rangaswamy[1*], MD

[1]*Department of Internal Medicine, Texas Tech University Health Sciences Center – Permian Basin, Odessa, TX, USA*
[2]*School of Medicine, Texas Tech University Health Sciences Center – Permian Basin, Odessa, TX, USA*

BACKGROUND

The differential diagnosis for a Cavitary Lung Lesion (CLL) is vast. This patient was positive for Chlamydia IgG and COVID-19, which increases the risk of delayed CLL. Granulomatosis with polyangiitis can also present as a delayed CLL, even without renal involvement or positive ANCA serologies, and may take several months to diagnose.

CASE DESCRIPTION

A 23-year-old male with T1DM on insulin, mild intermittent asthma and marijuana abuser presented with a 2-week history of right lower pleuritic chest pain and 2-days of high-grade fever and cough with green, foul-smelling sputum. He denied any recent travel history and sick contacts but had COVID-19 1 month prior. Vital signs were normal, including SP02 96% on RA. PE revealed reduced breath sounds in the right lower lobe (RLL). Labs showed neutrophilic leukocytosis and HbA1C 6.1. CTPE showed CLL in the RLL measuring 5.5 cm with viscous exudate. An IR-guided chest tube (CT) was placed for abscess drainage, and biopsy showed extensive eosinophilic tissue necrosis. Blood cultures, Sputum cultures, including AFB and fungal cultures, were negative. However, the Chlamydia Pneumoniae IgG titer was 1:256. Vasculitis workups were negative. Patient was treated with broad-spectrum antibiotics, and fluconazole for fungal coverage. A repeat CT Chest after 5 days of IR-guided CT placement and IV antibiotics showed RLL abscess decreased significantly in size. Patient clinically improved except for mild pleuritic chest pain on the seventh day of hospitalization and was discharged home.

CONCLUSION

This case supports the management strategy of deploying adequate empiric antibiotics and anti-fungal therapy early in the course.

70. Mental Health and Healthcare Utilization Among Adolescents with Gender Identity Disorder: A National Study

Kodi, P.[1]*, MD, Nallu, P.[1], MD, Wisam, A.[1], MD, Shah, K.[2], MD, Desai, R.[1], MD, Zeeshan, M.[3], MD, Jain, S.[1], MD, MPH, MEHP

[1]Department of Psychiatry, TTUHSC – Permian Basin, Midland, Texas, USA
[2]Department of Psychiatry, Wake Forest Baptist Medical Center, Winston-Salem, North Carolina, USA
[3]Boston Children's Hospital/Harvard Medical School, Boston, Massachusetts, USA

BACKGROUND
Gender identity disorder (GID) has been reported to be associated with increased risk of mental health issues and suicidal behavior. This study aimed to evaluate the prevalence of comorbid behavioral issues and healthcare cost burden among adolescents with GID in the inpatient setting.

MATERIALS AND METHODS
We analyzed adolescent inpatient encounters for GID using ICD codes in the National Inpatient Sample dataset from Oct 2015-Dec 2017. Patients without GID were selected as controls and matched for age, gender, and race with propensity score matching. We compared demographics, comorbidities, hospitalization characteristics, and healthcare resource utilization between the two groups.

RESULTS
A total of 3145 patient records with GID (median age: 16, female: 71.4%, white 75.5%) were included in the study. In the GID group, mood disorders (88.9% vs. 29.9%) and anxiety disorders (61.0% vs. 22.7%) as well as suicide and self-inflicted injury (67.7% vs. 18.8%) were observed to be at a higher rate.

Primary reason for admissions were psychiatric disorders (84% vs. 25.6%) among GID group. Among patients admitted to the hospital for psychiatric hospitalization, the length of stay was longer (6.9 vs. 5.4 days, p: 0.005), and the hospitalization cost was also higher ($6804 vs. $5519, $p < 0.001$).

CONCLUSION
The study emphasizes the importance of customized healthcare for adolescents with GID, including a better understanding of their healthcare requirements. Healthcare providers should be alert to the higher risk of mental health problems and suicidal tendencies in this group and offer appropriate interventions to enhance their mental health outcomes.

71. Metastatic Papillary Serous Endometrial Adenocarcinoma Presenting as Tubo-Ovarian Abscess

Sabrina Leung[1#], MD, Crissie Gale[1#*], MD, Glen Bennion[1], MD

[1]*Department of Obstetrics, and Gynecology, TTUHSC – Permian Basin, Odessa, TX, USA*

BACKGROUND

Tubo-ovarian abscess (TOA) is an adnexal pathology that typically occurs as a complication of pelvic inflammatory disease (PID). In postmenopausal women, TOAs are associated with an increased risk of gynecologic malignancy and may warrant surgical intervention for diagnosis and treatment. Papillary serous endometrial adenocarcinoma is a relatively uncommon subtype (less than 10-20%) of endometrial cancer and tends to present at an advanced stage. Limited literature about the association between TOA and this subtype of endometrial cancer exists.

CASE DESCRIPTION

A 62-year-old female, G6P5015, initially presented with a 5-day history of right lower quadrant abdominal pain and was incidentally noted to have a 6-month history of postmenopausal bleeding. She was found to have a 4.5-cm right adnexal mass suspicious for tubo-ovarian abscess and a thickened endometrial stripe up to 1.8 cm with nonspecific echogenic material in the lower endometrial cavity concerning for endometrial malignancy on imaging. The patient was started on intravenous antibiotics for suspected tubo-ovarian abscess. She underwent diagnostic hysteroscopy, dilation and curettage, and diagnostic laparoscopy. During the procedure, a fungating endometrial lesion and a right adnexal abscess with colonic involvement were identified. Drainage of the abscess was performed. Endometrial curettings and a biopsy of the abscess wall were obtained. Histopathological evaluation confirmed diagnosis of high-grade papillary serous endometrial carcinoma with metastasis to the right adnexa, and the patient was determined to have stage IV disease.

CONCLUSION

Finding of a tubo-ovarian abscess in a postmenopausal woman may have important clinical implications for diagnosis and staging of aggressive subtypes of endometrial cancer.

72. Renal Sarcoidosis Causing Acute Renal Failure – An Unusual Form of Presentation of Sarcoidosis in a Young Adult

Roman Karkee[1]*, MD, Arjan Singh[1], MD, Barath Rangaswamy[1], MD, Anand Reddy[2], MD

[1]Department of Internal Medicine, TTUHSC – Permian Basin, Odessa, Texas, USA
[2]Permian Basin Kidney Center, Odessa, Texas, USA

BACKGROUND

Sarcoidosis is a multisystemic granulomatous disease. Intrathoracic involvement is the most common type (>90%). Renal sarcoidosis is extremely rare (~ 0.7%).

CASE DESCRIPTION

A previously healthy 36 years female presented with 6 weeks history of fatigue, generalized body aches, nonproductive cough, loss of appetite and weight loss (7lbs). No significant family history noted. Vitals signs and physical exam were unremarkable. Labs showed Hb 9.5 gm/dl, elevated creatinine7.8 mg/dl. Low levels of 25-OH vitamin D, normal 1,25 -dihydroxy vitamin D and elevated serum PTH were noted. Calcium and phosphate were normal. Urinalysis revealed mild leukocytes, elevated leukocyte esterase along with mild glucosuria, hematuria and proteinuria. Infection workup was negative. Total 24-hour urine protein was elevated 486.5 mg. Urine light chains were mildly elevated. Serum electrophoresis showed no M spike. Autoimmune panel was normal. Relevant imaging studies were all normal. Due to unexplained renal failure, renal biopsy was performed revealing severe acute interstitial nephritis with acute tubular injury and necrosis, noncaseating granulomas with multinucleated giant cells. Diagnosis of sarcoidosis was established and steroid therapy was initiated. On outpatient follow up, bronchoscopy guided lung biopsy which showed non-necrotizing granuloma confirming the diagnosis of sarcoidosis.

CONCLUSION

Renal involvement of Sarcoidosis is extremely rare thus making it an underestimated cause of AKI leading to diagnostic delays. Clinicians should have a high index of suspicion especially for young patients presenting with unexplained AKI, mild to moderate proteinuria with or without systemic involvement. Early renal biopsy and timely administration of steroids can prevent irreversible renal damage.

73. The Lethal Allure of Asphyxiophilia: An Under-recognized Cause of Pneumocephalus and Death

Lutfor Nessa[1*#], MD, MPH, Genesis Perez Del Nogal[1#], MD, Joud Enabi[1], MD, Alejandra Garcia Fernandez[1], MD

[1]Department of Internal Medicine, Texas Tech University Health Sciences Center – Permian Basin, Odessa, TX, USA

BACKGROUND

Pneumocephalus due to barotrauma is rare. Asphyxiophilia is a dangerous sexual masochism disorder that can cause Pneumocephalus and is linked to high mortality rates. Timely treatment has a good prognosis for Pneumocephalus, even with tension present.

CASE DESCRIPTION

An 18-year-old Hispanic female with no medical history presented with new-onset seizures. EMS received a report from a male acquaintance who claimed that during intercourse, she suddenly screamed, became lethargic, vomited, and had a seizure. He denied any involvement in aggressive sexual activity. However, due to the male acquaintance's absence during the hospital visit, the accuracy of his claims could not be verified. On examination, the patient withdrew to pain on all extremities. Initial CT head revealed numerous tiny pockets of intraparenchymal pneumocephalus bilaterally. Empiric antibiotics were started. An echocardiogram with bubble study ruled out PFO. A day after admission, MRI brain revealed cerebellar tonsils herniation due to increased intracranial pressure and neurosurgery deemed the patient unsuitable for surgery. Two days later, the patient showed signs of brain death during neurological examination and unfortunately passed away due to severe brain damage.

CONCLUSION

Asphyxiophilia is a potentially fatal disorder that is often overlooked as a cause of death. Our case study emphasizes the under-recognized connection between erotic asphyxia and pneumocephalus. However, due to the stigma surrounding this disorder, families may withhold crucial information about the events leading to admission. It is essential for healthcare providers to be aware of this disorder and obtain details of the scene to aid in early diagnosis and prevent potential fatalities.

74. Post-Myocardial Infarction Pseudoaneurysm Complicated with Free Wall Rupture

Muhammad Waqar Sharif[1#], MD, Joud Enabi[1#*], MD, Maida Faheem[1], MD, Alejandro J. Herrera-Ramos[1], MD, Kejal Shah[1], MD

[1]Department of Internal Medicine, Texas Tech University Health Sciences Center – Permian Basin, Odessa, TX, USA

BACKGROUND

Left ventricular free wall rupture (LVFWR) has a high mortality rate that can reach up to 88.2%. The incidence of LV pseudoaneurysm after MI is 0.2% to 0.3%.LV pseudoaneurysm carries a high risk of rupture if left untreated, as high as 30% to 45%.

CASE DESCRIPTION

A 70-year-old female presented to our service after having cardiac arrest. When the EMS arrived, the patient had bradycardia with no pulse. After 4 minutes of CPR, ROSC was achieved. Upon arrival, her pulse was lost again, and she was found to have ventricular tachycardia. Synchronized cardioversion was done, and a Norepinephrine vasopressor was initiated. EKG revealed sinus rhythm, and T wave inversions in Inferior leads II, III avF. Computerized tomography angiography for pulmonary embolism revealed a large volume hemopericardium with moderate collapse of the right atrial chamber. There was a 10 mm rounded focus of contrast material communicating with the left ventricular chamber and penetrating the free wall of the left ventricular myocardium, suspicious of left ventricular pseudoaneurysm as the source of hemopericardium. On the echocardiogram, the right ventricle appears to have collapsed and compressed by extrinsic compression with a large clot in the pericardial space. Pericardiocentesis was attempted, however, the patient went into cardiac arrest again during the procedure and passed away.

CONCLUSION

In the era of PCI, the mortality rates due to myocardial infarction have declined consistently. Early reperfusion and the surgical approach to such conditions remain the mainstay of treatment for LVFWR and help reduce mortality.

75. An Incidental Finding of Renal Cell Carcinoma Compressing on IVC in a patient presenting with Atrial Fibrillation with Rapid Ventricular Response

Stephanie Rodriguez[1*#], PGY2, SivaTeja Pati[1*#], MS[4], Nimat Alam[1], MD

[1]Department of Family Medicine, Texas Tech University Health Sciences Center – Permian Basin, Odessa, TX, USA

BACKGROUND

Atrial Fibrillation is typically caused by the stretching of the atria. It is commonly seen in patients with increased preload or afterload pressures. It is the most common arrhythmia of the heart. Several known risk factors for atrial fibrillation include advanced age, male age, obesity, diabetes mellitus, sedentary lifestyle, hypertension, and obstructive sleep apnea. The common progression of atrial fibrillation is to have hyperexcited atrium that results in differences in contraction relationship between atria and ventricle. Which furthermore leads to increased risk of clot formation, especially in the left atrial appendage, which then places patients at risk of stroke or thromboembolism.

CASE DESCRIPTION

In this case report, among common risk factors of advanced age, obesity, male age, and hypertension, a new variable was added that placed the patient at even higher risk of venous thromboembolism and is believed to have prompted the patient to enter atrial fibrillation. Suspected inciting factor was a Stage 4 Renal Cell Carcinoma that was compressing on the IVC, and causing increased pressures in the atrium.

CONCLUSION

This case stresses the importance of atypical etiologies of atrial fibrillation. Recognition and early detection of a cancer in patients with atrial fibrillation is vital, especially given that it can potentially cause life threatening bleeding if usual treatment is initiated so team-based decisions involving cardiology and hematology are encouraged.

76. Double Trouble: Uterine Didelphys

Ashley Lopez[1#], DO, Suna Burghul[1#], DO, David Moore[1*], MD

[1]Department of OB-GYN, Texas Tech University Health Sciences Center – Permian Basin, Odessa, TX, USA

BACKGROUND

Mullerian anomalies are rare but can lead to significant maternal and neonatal morbidity. In didelphys uterine anomaly, there is a complete failure of approximation and fusion of the Müllerian ducts giving rise to two uterine cavities, cervices, and vaginas separated by a longitudinal septum. Uterine anomalies can lead to recurrent pregnancy loss, fetal malpresentation, fetal growth restriction, and preterm delivery. This report will discuss the case of a preterm gestation complicated by late recognition of uterine didelphys leading to failed induction of labor and cesarean section.

CASE DESCRIPTION

A G2P0010 at 29 weeks gestation presented to labor and delivery for elevated blood pressure and vaginal bleeding. She was then diagnosed with pre-eclampsia with severe features and decision was made to proceed with induction of labor. The patient failed to progress and a cesarean section was recommended. A final sterile digital cervical exam prior to her cesarean delivery raised suspicion for two cervixes. During the delivery of the fetus there appeared to be two uterine cavities and an irregular uterine shape was observed. After delivery, a thorough pelvic exam revealed two separate cervixes and a prominent vaginal septum. Postpartum MRI confirmed the diagnosis of uterine didelphys.

CONCLUSION

The true incidence of Müllerian anomalies is not known but is estimated to be 0.5-6.7% in the general population. Although rare, early recognition of these anomalies is key to preventing adverse outcomes. Early recognition in our patient's case may have helped her avoid a cesarean section by directing our cervical ripening efforts to the correct cervix.

77. Rituximab for Libman-Sacks Endocarditis

Samhitha Gonuguntla[1]*, MD, Andres Mata[1], MD, Bosky Modi[1], MD, Barath Rangaswamy[1], MD Srikanth Mukkera[1], MD, Kejal Shah[1], MD

[1]Department of Internal Medicine, TTUHSC – Permian Basin, Odessa, TX, USA

BACKGROUND

Systemic lupus erythematosus (SLE) and antiphospholipid syndrome (APS) can cause Libman-Sacks endocarditis (LSE). Endothelial injury secondary to a hypercoagulable state in active disease is thought to be the pathophysiology behind LSE.

CASE DESCRIPTION

We present a 36-year-old Hispanic female with a history of SLE and APS on treatment with methotrexate, hydroxychloroquine, prednisone, and warfarin with recurrent admissions to the hospital for symptoms of stroke. Transthoracic and transesophageal echocardiograms revealed moderate mitral regurgitation and thickening of the mitral valve distal tips suggestive of vegetations. Blood cultures were negative. A diagnosis of LSE was made. Additionally, low complement levels indicated active SLE. Rheumatologist recommended adding mycophenolate mofetil and rituximab. We continued warfarin with regular INR monitoring.

CONCLUSION

In Libman-Sacks endocarditis, stroke or TIA is due to embolisms from the sterile vegetation. Active SLE or APS increases the chances of developing new vegetations or expanding existing vegetations. Hence, adequate control of the disease is essential to avoid such complications. B-cells are thought to contribute to the pathology of SLE. Monoclonal antibodies for CD20, such as rituximab, act against the CD20 on the B-cell and cause immunosuppression, leading to disease control and reducing the vegetation burden. The treatment of choice for LSE is valve replacement. If the disease activity is not well controlled, there is a high risk of developing new vegetation on the replaced valve. Additionally, if the disease is poorly controlled, the surgery itself can worsen the disease activity. Adequate control with Rituximab may even prevent the need for surgery.

THANK YOU!

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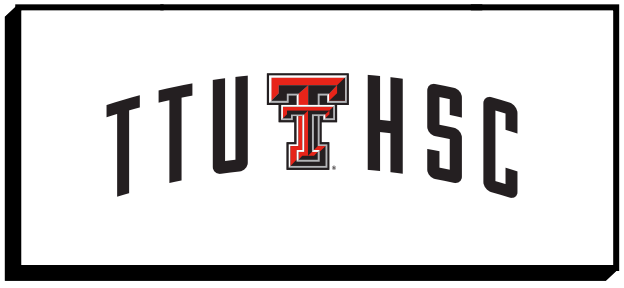
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