# **Chronic Psoriasis with Vulvar Presentation: A Case Report** Nathan Manales<sup>1</sup>, B.S., Maricela Chavez<sup>1</sup>, M.D., Gary Ventolini<sup>1\*</sup>, M.D. <sup>1</sup>Texas Tech University Health Sciences Center at the Permian Basin, \*Corresponding Author

## BACKGROUND

- Lacking a distinct cause, cure, and affecting up to 2% of the population, psoriasis is a common chronic skin condition presenting itself as the formation of red, dry, and scaly patches that tend to itch.
- Involvement of the genitalia occurs in 30-40% of patients with psoriasis, with 2-5% of patients with limited genital psoriasis, and is not due to any kind of sexually transmitted infection nor is it contagious.
- Although a cure does not currently exist, there are many treatments and methods available to control it, such as avoiding irritants, using moisturizing ointments, and wearing lose clothing.

## CASE PRESENTATION

A 39-year-old reported a feeling of ceaseless itching, specifically in her fourchette. The patient was not sexually active and had been diagnosed with psoriasis located on her elbows, hair line, and feet. She had frequent recurrences and her treatments involved high potency topical and oral steroids, skin moisturizers, coal tar, vitamin D, and ultraviolet rays targeted at her lesions. Her dermatologist referred her back to her primary care physician who then tested her for bacterial vaginosis, candidiasis, and common STDs. All came back negative. During the examination, an area in the fourchette, between the mucosa and skin, had a well-demarcated area of 1.7 cm that was noted to be erythematous, slightly raised, and non-scaly. This area was then identified by the patient as the area that was itching. Given her medical history and the clinical presentation of the lesion, the patient was diagnosed with vulvar psoriasis with a good degree of certainty. A biopsy was declined by the patient. The patient was advised to wear smooth cotton unscented underwear, to keep the area well moisturized with Astroglide, and to use a medium potency steroid ointment. She informed our nurse a few days later stating that her condition improved significantly. Similar to her general psoriasis, she was instructed that the rash on her vulvar site will also reoccur from time to time.

Image 1: Clinical photograph of erythematous psoriatic lesion located on patient's forehead.



Image 2: Clinical photograph of a small erythematous, non-scaly psoriatic lesion located in the vaginal fourchette.



## DISCUSSION

- Genital involvement can be associated with considerable psychologic stress, with a negative effect on quality of life, especially on sexual relationships.<sup>1</sup>
- Vulvar psoriasis may present with the classic plaque type or inverse psoriasis, with a nonspecific, poorly demarcated erythema. Generally, this presentation also includes mild to severe pruritus of the affected area.<sup>2</sup>
- The genital area tends to be more prone to friction and perspiration which may cause increased pain or burning sensation due to increased inflammation.<sup>3</sup>
- Diagnosis is based on clinical presentation. Routine biopsy of lesions is not needed for diagnosis, but histopathologic features of vulvar psoriasis are similar to those from nongenital psoriasis.<sup>4</sup>
- Clinical confirmation is often provided by whole-body skin examination, which reveals features of generalized or inverse psoriasis.<sup>4</sup>
- Diagnosis may be complicated by superimposed infection, contact dermatitis or changes of lichen simplex chronicus. Differential diagnosis includes but not limited to vulvovaginal candidiasis, sexually transmitted infections, lichen simplex chronicus, extra-mammary Paget's disease, and contact dermatitis. If clinical diagnosis is unclear or lesions are unresponsive to treatment, then skin biopsy may be warranted. <sup>3,5</sup>
- Treatment guidelines for vulvar psoriasis generally follow the same treatment plan as use comes with the risks of atrophy, telangiectasia, striae, and ulceration. Topical vitamin D analogs or topical calcineurin inhibitors are a good option for long term therapy, as they do not share similar risk profiles.<sup>3,6</sup>
- Adjunct treatments include hydration and emollients as keeping psoriatic skin soft and moist minimizes the symptoms of itching and tenderness. Severe vulvar psoriasis may require systemic therapy, such as methotrexate or other biologic agents.<sup>7,8</sup>

intertriginous psoriasis treatment. First line treatment includes topical steroids. Topical steroid

## CONCLUSION

Psoriasis is a fairly common chronic skin condition that can present itself in many different areas on the body. Vulvar psoriasis can be a difficult diagnosis that should be considered in patients presenting with a chronic erythematous vulvitis without vaginitis. Thorough history and physical should be taken into consideration. The condition can cause major psychological burden by decreasing one's quality of life and stress on sexual relationships. Psoriasis and all of its satellite lesions are a chronic relapsing skin condition that requires long-term management.

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Image 3: Clinical photograph of multiple crusted scaly psoriatic lesions located on the dorsum of patient foot.





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