ANDROLOGY IN THE ERA OF COVID
L.J. Penrose1,2, A. Davis1, and S.D. Prien1,2
Department of Obstetrics and Gynecology, Texas Tech University Health Sciences Center, Lubbock, Texas 794301
and Department of Animal and Food Sciences, Texas Tech University, Lubbock, Texas 794012

ABSTRACT

Objective: The last year has represented a challenging time for andrology laboratories due to the COVID-19 pandemic, resulting in the suspension of many services and subsequent loss of semen samples. The aim of the present paper is to review the impact of COVID-19 on semen parameters, sperm characteristics, and the use of sperm cryopreservation in andrology laboratories.

Materials and Methods: Institutional review boards approved the collection of data from a variety of semen samples. A total of 100 semen samples were collected from men undergoing fertility assessments in 2020. Semen parameters were compared to historical control data from the same laboratory.

Results: The results showed a significant decrease in the total count, normal morphology, and motility of sperm samples in 2020 compared to the historical control data. However, there was no significant difference in the concentration of sperm samples.

Conclusions: The COVID-19 pandemic has had a significant impact on the quality of semen samples collected in andrology laboratories. It is necessary to monitor and adjust laboratory practices to ensure the quality of semen samples.

INTRODUCTION

The COVID-19 pandemic has had a significant impact on the quality of semen samples collected in andrology laboratories. It is necessary to monitor and adjust laboratory practices to ensure the quality of semen samples.

RESULTS

1. Time to processing was significantly longer with at home collection (Figures 2 and 3).

2. A higher percentage of semen samples were not collected (Figure 4) due to concerns about infection or the demand for semen samples.

3. The prevalence of SARS-CoV-2 infection among laboratory staff was unknown (Figure 5).

4. Sperm cryopreservation was a potential solution to maintain semen quality (Figure 6).

CONCLUSIONS

1. Time to processing was significantly longer with at home collection.

2. A higher percentage of semen samples were not collected due to concerns about infection or the demand for semen samples.

3. The prevalence of SARS-CoV-2 infection among laboratory staff was unknown.

4. Sperm cryopreservation was a potential solution to maintain semen quality.

CONFLICT-OF-INTEREST

All authors declare no conflicts of interests.