

12. THE ROLE OF PROSTATIC INFLAMMATORY PATHOLOGIES ON MALE FERTILITY



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Introduction. Inflammation significantly impacts prostate health, contributing to issues like prostatitis. Triggered by infection, autoimmune response or other factors, it can compromise sperm quality or cause prostate dysfunction, affecting male fertility. This review explores prostatitis, focusing on infections and reported seminal quality changes.

Aim of study. High occurrences of male infertility are common among infertile couples, and inflammation in the prostate, regardless of its cause, can significantly impair the reproductive capabilities. Given the prevalent occurrence of prostatitis in males, its impact on infertility is substantial.

Methods and materials. A literature review study about the impact of prostatitis on male fertility was performed. The source selection prioritized detailed coverage, including research and case studies. Emphasis was placed on up-to-date publications from PubMed etc. The search strategies, utilizing keywords, aimed to refine results and provide a thorough understanding of prostatitis and infertility.

Results. Male urogenital infections impact fertility, with conflicting effects on sperm quality noted in the 2023 UAE protocol. Studies on STIs show limited evidence of a strong link to infertility. Prostatitis, the third most common urinary tract disease, is challenging to treat. Seminal analysis is crucial for evaluating infections and assessing sperm quality. P(+)leukocytes $>10^6/\text{mL}$ suggest inflammation; PCR analysis is recommended for specificity. Ureaplasma significantly affects male fertility. Viruses may impact sperm quality. Leukocytospermia's connection to infertility varies; $>10^6/\text{mL}$ indicate infection, but alone doesn't confirm infertility. Chronic prostatitis harms sperm parameters, with Ureaplasma often found in infertile men. Pathogens (C. Trachomatis and Ureaplasma) can reduce sperm parameters, including DNA damage. The role of bacterial infections in forming antisperm antibodies remains uncertain.

Conclusion. In summary, it is evident that exploring underlying prostatitis is warranted in cases of male infertility, particularly considering its often asymptomatic nature. In this regard, a comprehensive semen analysis, with a focus on leukospermia in the prostatic fluid, along with accurately collected prostatic fluid cultures, is crucial.