Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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Letter to Editors

SARS-CoV-2 and prostatitis: Dangerous relationship for male sexual and reproductive health

To the Editor,

Prostatitis is considered the most common urological disorder in men younger than 50 years as it has a general prevalence of 14.2% that increases with age [1]. Prostatitis classification includes four categories depending on its origin, namely, acute bacterial infection, chronic bacterial infection, chronic pelvic pain with and without signs of inflammation, and asymptomatic prostatitis. Specifically, chronic prostatitis is associated with risk factors such as obstruction of the lower urinary tract, urethral catheterization and infections caused by bacteria, viruses, and even parasites [2,3]. However, there are few articles on virus infections in prostatic secretions.

In 2000, World Health Organization (WHO) recognised the role of genital tract infections in human infertility, among which prostate infections are very relevant [3]. However, in most individuals they are asymptomatic, which favours the chronicity of the process.

On the other hand, evidence exists that the coronavirus can cause orchitis (SARS-CoV), testicular damage, and germ cell destruction as clearly observed in human [4]. Recently, SARS-CoV-2 was detected in semen samples [5]. Therefore, it is not unreasonable to believe that the latest coronavirus could potentially be transmitted via semen [6].

It was also reported that angiotensin converting enzyme 2 (ACE2) is a functional receptor that mediates the entry of SARS-CoV-1 [7] and 2 [8], and this receptor is expressed in the prostate. Thus, virus binding to these ACE2 positive cells can potentially not only cause tissue alterations but also serve as a source of the virus secreted and actively pass to the ejaculate.

Thus, there is a significant group of patients with COVID-19 who are susceptible to suffering from prostatitis. Perhaps in the coming years, the real effect of SARS-CoV-2 on prostatitis cases will be evaluated and scope for researching factors that cause the clinical syndrome will be expanded. Further, it is possible that viral typing tests will be routinely carried out, among which the coronavirus will be mandatory.

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Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.mehy.2020.109914.

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