



## 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.

**Funding sources**

The article has no funding source.

**Declaration of Competing Interest**

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

**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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<https://doi.org/10.1016/j.mehy.2020.109914>

Received 18 April 2020; Received in revised form 13 May 2020; Accepted 28 May 2020  
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