

LETTER TO EDITOR

What could cause the long-term effects of COVID-19 on sperm parameters and male fertility?

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Sir,

We would like to congratulate you for the original research recently published in QJM entitled 'Post-Covid-19 associated decline in long-term male fertility and embryo quality during assisted reproductive technology (ART)'.¹ The authors showed a major alteration in sperm parameters and sperm DNA damage in a man tested positive for COVID-19; this had an impact on post-ART embryo morphology. The authors suggested that these signs were specifically due to COVID-19.

Fever is a symptom observed in more than 80% of patients with COVID-19. Indeed, the physiological mechanisms of thermal regulation of the scrotum are exceeded when the body temperature rises by even one degree Celsius. Thus, fever, even of limited duration, can, on its own, induce sperm parameters major alteration, sperm DNA damage, sperm apoptosis and germ cell death as previously described.^{2,3} The return of sperm parameters to basal state can take a long time, more than 3 or 4 months.^{4,5} For this reason, it has been recommended from the onset of the pandemic to delay ART management for at least 3 months in men diagnosed with COVID-19.⁶ In the absence of fever, the effects of the new coronavirus and COVID-19 on sperm parameters and male fertility remain unclear.

Conflict of interest. None declared.

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