

SYNOPSIS

05/09/2020

Review of “Clinical characteristics and results of semen tests among men with coronavirus disease 2019”

Article citation: Li D, Jin M, Bao P, Zhao W, Zhang S. Clinical characteristics and results of semen tests among men with coronavirus disease 2019. *JAMA Netw Open.* 2020;3:e208292. Available from: <https://doi.org/10.1001/jamanetworkopen.2020.8292>

One-Minute Summary

- The authors describe the **detection of SARS-CoV-2 in semen specimens** from a cohort of patients with confirmed coronavirus disease 2019 (COVID-19) in a hospital in Shangqiu, China.
- Out of 50 male patients of at least 15 years of age admitted between January 26 and February 16, 2020, 38 were able to provide a semen specimen.
 - 23/38 (60.5%) had achieved clinical recovery at the time of providing the specimen.
 - 15/38 (39.5%) were in the acute phase of the infection.
- **6/38 (15.8%) of the semen specimens tested positive for SARS-CoV-2** by real-time reverse transcriptase-polymerase chain reaction (rRT-PCR).
 - **2/23 (8.7%) specimens were positive from patients who had clinically recovered 2-3 days prior** (range of 12-14 days since symptom onset).
 - **4/15 (26.7%) specimens were positive from patients in the acute phase of infection** (range of 6-11 days since symptom onset).
- These findings confirm that SARS-CoV-2 RNA can be detected in semen specimens from clinically recovered patients and up to 16 days after the onset of symptoms.

Additional Information

- The 12/50 (24%) patients with COVID-19 who did not provide a semen sample were unable due to erectile dysfunction, being in a comatose state or were deceased.
- There was no significant association between the presence of SARS-CoV-2 in semen specimens and patient characteristics such as age, the presence of urogenital disease, days since symptom onset, days since hospitalization or days since recovery.
- The authors noted the study is limited by the small sample size and the short follow-up timeframe.

PHO Reviewer's Comments

- The authors classified the patients as being in the acute stage of infection or having achieved clinical recovery. Neither of these terms were defined and may be subjective if dependent strictly on patients reporting the severity of their symptoms.
- This study does not explore if infective virus is present in semen. Further studies are required to investigate sexual transmission of SARS-CoV-2.

Citation

Ontario Agency for Health Protection and Promotion (Public Health Ontario). Review of “Clinical characteristics and results of semen tests among men with coronavirus disease 2019”. Toronto, ON: Queen’s Printer for Ontario; 2020.

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