SPECIAL ISSUE ARTICLE



Sexually transmitted COVID-19

Dear Editor.

We read with great interest a "letter to the Editor" published in the journal of *Dermatologic Therapy* by Gaspari et al, who speculated that certain percentage of the asymptomatic population could spread severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) through sexual contact (vaginal, anogenital and orogenital), and anal swab for all coronavirus disease 2019 (COVID-19) patients and those with negative nasopharyngeal swab may be considered. Another letter to the Editor published by Hafi et al² stated that "a definitive statement regarding sexual transmissibility is not possible unless infectivity is proved by virus isolation," and the concept of "sexual abstinence" during COVID-19 pandemic is not a healthy advice.

In their study on healthy women, Yuksel and Ozgor found a significantly higher sexual desire and frequencies of sexual intercourse during COVID-19 pandemic compared with 6 to 12 months prior.³ In another study by Qiu et al⁴ on 10 severely infected women with COVID-19, no SARS-CoV-2 virus was noted in their vaginal fluids. They concluded that likelihood of transmitting SARS-CoV-2 to sexual partners through vaginal fluids may be low. However, only postmenopausal women were studied and the vaginal swabs were taken 17 days or more after disease onset, which was not ideal for viral detection by reverse transcriptionpolymerase chain reaction (RT-PCR). Lower viral spreading to genital organs and genital secretions may be due to low rate of viremia for COVID-19.5 Genital contamination with genital fluids, even with low rate, is not unexpected. Due to risk of "genital" contamination with SARS-CoV-2 infection, Delfino et al⁶ recently recommended to perform routine RT-PCR assays for SARS-CoV-2 detection at least on three swabs, nasopharyngeal, vaginal, and rectal, in order to decrease the possible risk of vertical transmission of the infection in pregnant women.

Despite being a debatable point of discussion, possible sexual transmission for SARS-CoV-2 could place some sexual minorities, such as transgender and men have sex with men (MSM), at disproportionately higher risk. MSM are also at risk for sexual transmission of enteric pathogens presenting with gastroenteritis from varied pathogens, including viral gastroenteritis.⁷ The fecal-oral route of viral transmission through sexual contact is hence plausible. Despite nasopharyngeal testing negativization, COVID-19 patients can persistently result positive on rectal swabs.3 MSM at risk of HIV infection may also continue to engage in risky health behaviors, including ignoring stay-at-home orders, getting in condomless physical contact with possible COVID-19 partners, or have poor access to necessary sexual health clinics, HIV prevention services, and sexually transmitted disease (STD) testing during the current COVID-19 pandemic situation.8 MSM patients younger than 50 years might be at higher risk of COVID-19. We suggest rectal swab to be tested for higher risk suspected contact.

Due to their engagement in fighting COVID-19 pandemic, dermatologists may have the fortune to document a myriad of cutaneous signs in COVID-19 patients; Ehsani et al⁹ recently reported a case of a young male patient presented with disseminated "pityriasis rosea" (PR) lesions preceded by fever, fatigue, gastroenteritis, and anorexia 3 days before. The patient later showed radiological finding of COVID-19. Recently, Dursun and Temiz noted the number of their PR adult patients had increased approximately five times during the COVID-19 pandemic compared to the same time last year. ¹⁰ Exclusion of STDs is a rule while evaluating PR in a sexually active adult. Could PR in COVID-19 patient be a marker for STDs remains an open question.

Patients with sexual minorities should have more attention in the current situation. They are at risk of not only STDs, but also SARS-CoV-2 through genital contamination. COVID-19 patients presented with PR, or known STD, should be enquired about their sexual behavior/preference, and should undergo more than a nasopharyngeal swab before considering negativity of infection.

CONFLICT OF INTEREST

The authors declare no conflicts of interest.

AUTHOR CONTRIBUTIONS

All the authors worked equally in preparing this manuscript for submission to *Dermatologic Therapy*. They collected the scientific data and shared in writing the initial draft. Ayman Abdelmaksoud reviewed and submitted the final draft.

Ayman Abdelmaksoud¹ (i)

Michelangelo Vestita^{2,3}

Mohamad Goldust^{4,5,6}

¹Department of Dermatology, Mansoura Dermatology, Venerology and Leprology Hospital, Mansoura, Egypt

²Unit of Plastic and Reconstructive Surgery, Department of Emergency and Organ Transplantation, University of Bari, Bari, Italy

³Department of Dermatology, Brigham and Women's Hospital, Harvard Medical School, Boston, Massachusetts, USA

⁴Department of Dermatology, University of Rome G. Marconi, Rome, Italy ⁵Department of Dermatology, University Medical Center Mainz, Mainz,

> ⁶Department of Dermatology, University Hospital Basel, Basel, Switzerland

Correspondence

Ayman Abdelmaksoud, Department of Dermatology, Mansoura Dermatology, Venerology and Leprology Hospital, 5-Amien Alsamanoudy Street, From Abdelsalam Aaref Street, Mansoura, Egypt. Email: behcet.behcet@yahoo.com

ORCID

Ayman Abdelmaksoud https://orcid.org/0000-0003-4848-959X
Michelangelo Vestita https://orcid.org/0000-0002-2203-0353
Mohamad Goldust https://orcid.org/0000-0002-9615-1246

REFERENCES

- Gaspari V, Lanzoni A, Patrizi A, Orioni G, Viviani F, Bardazzi F. Can Covid-19 be a sexually transmitted disease? Posterity will judge. Dermatol Ther. 2020;e13676. https://doi.org/10.1111/dth.13676.
- Hafi B, Uvais NA, Jafferany M, Afra TP, Muhammed Razmi T. Can COVID 19 virus be transmitted through sex? *Dermatol Ther*. 2020. https://doi.org/10.1111/dth.13679.
- Yuksel B, Ozgor F. Effect of the COVID-19 pandemic on female sexual behavior. Int J Gynaecol Obstet. 2020;150:98-102. https://doi.org/10.1002/ijgo.13193.
- Qiu L, Liu X, Xiao M, et al. SARS-CoV-2 is not detectable in the vaginal fluid of women with severe COVID-19 infection. Clin Infect Dis. 2020;ciaa375. https://doi.org/10.1093/cid/ciaa375.

- Kashi AH. COVID-19 and semen: an unanswered area of research. Urol J. 2020;17(3):328.
- Delfino M, Guida M, Patrì A, Spirito L, Gallo L, Fabbrocini G. SARS-CoV-2 possible contamination of genital area: implications for sexual and vertical transmission routes. *J Eur Acad Dermatol Venereol*. 2020. https://doi.org/10.1111/jdv.16591.
- Newman KL, Newman GS, Cybulski RJ, Fang FC. Gastroenteritis in men who have sex with men in Seattle, Washington, 2017-2018. Clin Infect Dis. 2020;71:109-115. https://doi.org/10.1093/cid/ciz783.
- Sanchez TH, Zlotorzynska M, Rai M, Baral SD. Characterizing the impact of COVID19 on men who have sex with men across the United States in April, 2020. AIDS Behav. 2020. https://doi.org/10. 1007/s10461-020-02894-2.
- Ehsani AH, Nasimi M, Bigdelo Z. Pityriasis rosea as a cutaneous manifestation of COVID-19 infection. J Eur Acad Dermatol Venereol. 2020. https://doi.org/10.1111/jdv.16579.
- Dursun R, Temiz SA. The clinics of HHV-6 infection in COVID-19 pandemic: pityriasis rosea and Kawasaki disease. *Dermatol Ther*. 2020;e13730. https://doi.org/10.1111/dth.13730.

How to cite this article: Abdelmaksoud A, Vestita M, Goldust M. Sexually transmitted COVID-19. *Dermatologic Therapy*. 2020;33:e13982. https://doi.org/10.1111/dth.13982