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DERMATOLOGIC THERAPY WILEY

LETTER

Potential hazards posed by cryotherapy during the COVID-19 era

Dear Editor,

Cryotherapy is a technique commonly employed by dermatologists in outpatient clinics, particularly for viral warts and treatment of keratinocyte skin cancers. Whilst cryotherapy is rapid and inexpensive to undertake in an outpatient clinic, there are widely recognized risks including pain, blistering, scarring, discoloration (frequently hypopigmentation) and alopecia. Despite multiple articles discussing the risks posed by other treatment modalities,[1] there remains a lack of guidelines failed to discuss the risk posed by cryotherapy in the COVID-19 era.

In an article by Ross et al,[2] 11 patients undergoing laser hair removal were treated with a 755- or 1064-nm millisecond-domain laser combined with cryogen spray, refrigerated air (RA) or contact cooling (CC) with sapphire. Cryogen spray produced large amounts of plume with over 400 000 parts per cubic centimeter, compared with 3500 parts for CC and 35 000 for the RA. This laser plume is a potential hazard to dermatology practitioners, not only because of the possible hazardous chemicals produced in the plume, but also because of the risk of infection.[3] There have been no reported cases of COVID-19 transmission from surgical plumes. However, coronavirus particles' minute size (50-200 nm)[4]; the identification of particles outside of the respiratory tract in blood, peritoneal fluid and feces[5,6]; as well as the high transmissibility of the disease make the possibility of virus presence in inhaled fumes, from the use of cryosurgical spray, highly conceivable.[3,7] Whether targeted techniques such as intralesional cryotherapy[8] may reduce this risk remains to be seen.

In July 2020, following concern that cryotherapy of anogenital warts may be associated with aerosolization of COVID-19 due to coronavirus presence in feces, and following consultation with infection control experts, the British Association for Sexual Health and HIV (BASSH) released a position statement[9] concluding that cryotherapy is not an aerosol-generating procedure and therefore the risk of cryotherapy to health care workers is limited to that associated with the inability to maintain social distancing. However, dermatologists frequently undertake cryotherapy on high-risk sites such as the nasal and perioral skin and mucosae where aerosolization of coronavirus particles is more plausible than for extrafacial sites.

We feel diligent use of personal protective equipment and the consideration of smoke extractors might also be necessary precautions for dermatologists performing cryotherapy particularly on high-risk sites (such as the nasal and perioral skin and mucosae) in the present climate until sufficient safety data emerge to refute this.

CONFLICT OF INTEREST

The authors declare no potential conflict of interest.

DATA AVAILABILITY STATEMENT

Data sharing is not applicable to this article as no new data were created or analyzed in this study.

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