Mohs micrographic surgery outcomes following virtual consultations during the COVID-19 pandemic
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Dear Editor,

Recent articles in this journal have focused on qualitative clinician descriptions of alterations in service provision\(^1,2\) and on patient perception of changes during the COVID-19 pandemic,\(^3,4\) but few studies have explored whether these changes have impacted patient outcomes.

Each patient being considered for Mohs micrographic surgery (MMS) has a preoperative consultation to consider suitability of MMS and whether the procedure can be repaired in-house or via an external team (e.g. plastic surgery). MMS is described as having a number of stages and sections, which could be considered a measure for the ‘complexity’ and size of the tumour being extirpated.

As mandated nationally, virtual consultations (VCs) were encouraged during the pandemic to reduce the number of hospital visits. VCs include telephone consultations (with photograph sent by patient) and video consultations. We compared the number of stages and sections of MMS between patients who underwent face-to-face (F2F) consultation vs. VC during the period September–November 2020 in St John’s Institute of Dermatology.

In total, there were 257 F2F consultations and 177 VCs, with a 60 : 40 male/female split for F2F and 46 : 54 split for VCs. Mean age was 69 (range 25–94 years) for F2F consultations and 67 (range 22–93 years) for VCs. The F2F consultations were conducted in various clinics including clinical multidisciplinary skin cancer clinics, MMS consultation clinics and skin-cancer screening clinics (where patients are referred directly for MMS).

There was no statistically significant difference between the F2F and VC groups for mean number of MMS stages (1.74 for F2F and 1.82 for VC; \(P = 0.19\)) or number of sections (3.58 and 3.31, respectively; \(P = 0.11\)) (Fig. 1).

Furthermore, the planned reconstruction identified at consultation stage was always implemented and patients did not need referring to external surgical teams. There were no unexpected surprises.

Challenges noted included some patients requesting F2F consultations because of difficulties using video technology, clinicians requesting F2F consultations due to poor-quality photographs or no photographs received, and administration problems that resulted in the photograph not being forwarded to the clinician in advance.

![Figure 1](https://via.placeholder.com/150)

**Figure 1** Comparison of average Mohs micrographic surgery stages and sections between patients who underwent face-to-face (F2F) and virtual consultations over a 3-month period in 2020.
This is the first study exploring the impact of VC vs. F2F for MMS consultations. The main limitation is that it was a retrospective study; however, the sample size was relatively large. We acknowledge that the number of stages and sections and change in reconstruction plan is not always a direct correlate of case complexity.

In conclusion, VCs have not increased the number of stages and sections needed to clear tumours by MMS, and are a useful method of engaging with patients for MMS consultations as an alternative to F2F consultations. Patients also confirmed they felt just as well informed in the virtual environment. This may allow MMS to be more accessible, particularly to a wider geographical population who may find it difficult to attend for consultations. The enforced move to VC from F2F during 2020 did not adversely affect surgical outcomes, which is encouraging given the likely future adoption of teledermatology services. Similar analysis of patient outcomes following VC in other dermatology domains should be conducted before the long-term adoption of such techniques.

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Conflict of interest: the authors declare that they have no conflicts of interest.

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