Laryngology & Otology

cambridge.org/jlo

Editorial

Cite this article: Fishman J, Fisher E. Mixedreality technology for clinical communication, cocaine screening in patients undergoing nasal reconstructive surgery and prognostic factors for vocal fold leukoplakia. *J Laryngol Otol* 2023;**137**:1063. https://doi.org/10.1017/ S0022215123001603

Received: 10 September 2023 Accepted: 10 September 2023

Mixed-reality technology for clinical communication, cocaine screening in patients undergoing nasal reconstructive surgery and prognostic factors for vocal fold leukoplakia

Jonathan Fishman and Edward Fisher

In the post coronavirus disease 2019 educational landscape, virtual, augmented and mixed reality technologies may prove invaluable in training the next generation of surgeons.^{1,2} The authors of a study in this month's issue of *The Journal of Laryngology & Otology* sought out to objectively assess the impact of HoloLens, a mixed reality device, as a clinical communication device in a simulated on-call scenario.³ In their pilot study, 30 ENT trainees used either the HoloLens, or a traditional telephone, to communicate a clinical case to a senior colleague. The quality of the clinical communication was scored objectively and subjectively. This study demonstrated the benefit that mixed reality devices, such as the HoloLens, may bring to the clinical environment in terms of enabling improved communication. The authors recommend that further studies be undertaken in a real clinical setting to allow assessment of the practicalities of using such devices.

Nasal reconstructive surgery in the setting of cocaine abuse is complex, given its highly addictive properties (cocaine is the second most commonly used illicit drug in the UK behind cannabis) and potential to cause significant nasal defects.⁴ There is, however, a paucity of literature on current practice among UK rhinologists regarding cocaine screening in patients undergoing nasal reconstructive surgery. Raja *et al.* have conducted a pan-UK survey of UK rhinologists into this specific issue, and their study is published in this month's issue of *The Journal.*⁵ Fifty-three per cent asked patients about cocaine use prior to consideration of surgery, and 45 per cent specifically performed cocaine testing, urine drug screening was most commonly used, with 84 per cent of the respondents utilising urine testing, with or without other forms of testing. The authors propose a national formal policy for the pre-operative screening of active cocaine use in patients undergoing nasal reconstructive surgery.

Finally, Yin *et al.* conducted a study analysing predictive factors for poor prognosis (recurrence and malignant transformation) in 344 patients with vocal fold leukoplakia over a two-year period.⁶ The results demonstrate that lesion size, lesion form under white light, surgical method and pathological subtype were independent risk factors for recurrence. Pathological subtype was found to be the sole independent risk factor for malignant transformation.

References

- 1 Abbas JR, Kenth JJ, Bruce IA. The role of virtual reality in the changing landscape of surgical training. J Laryngol Otol 2020;134:863-6
- 2 Frithioff A, Frendø M, von Buchwald JH, Trier Mikkelsen P, Sølvsten Sørensen M, Arild Wuyts Andersen S. Automated summative feedback improves performance and retention in simulation training of mastoidectomy: a randomised controlled trial. J Laryngol Otol 2022;136:29–36
- 3 Orchard L, Van M, Abbas J, Malik R, Stevenson J, Tolley N. Mixed-reality technology for clinical communication: objective assessment of the HoloLens 2 as a clinical communication device in a simulated on-call scenario. *J Laryngol Otol* 2023;**137**:1165–9
- 4 Green RJ, Gardiner Q, Vinod K, Oparka R, Ross PD. A case series and literature review on patients with rhinological complications secondary to the use of cocaine and levamisole. *J Laryngol Otol* 2020;**134**:440–6
- 5 Raja H, Lai K, Sunkaraneni V. Cocaine screening in patients undergoing nasal reconstructive surgery: a crosssectional, survey-based study of UK rhinology consultants. *J Laryngol Otol* 2023;**137**:1149–53
- 6 Yin S, Huang H, Sun P, Zhang D. Analysis of prognostic factors for vocal fold leukoplakia based on 344 cases at a two-year follow up. *J Laryngol Otol* 2023;**137**:1170–5

© The Author(s), 2023. Published by Cambridge University Press on behalf of J.L.O. (1984) LIMITED