

still be triaged and seen. A clear referral with photographs will greatly aid this process. Biopsy under local anaesthesia and axial imaging remain available and virtual multi-disciplinary team meetings are running. Surgery involving free tissue transfer is extremely limited at present. However, if a tumour is detected at an early stage then wide local excision even under local anaesthesia is possible.

Sadly, mouth cancer is a condition that will be affected by the coronavirus pandemic. Only time will tell the true nature and enormity of this impact.

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## Don't forget about head and neck cancer

Sir, during the current virus situation there is a real risk that patients with malignant lesions present late to specialist teams, potentially resulting in worsened outcomes. Telephone consultation is available to patients via their GDP and offers an opportunity to identify high risk lesions and organise their timely onward referral if appropriate. Strict triage is essential and must include screening questions relating to head and neck oral squamous cell carcinoma.

In 2015, Birur *et al.* found remote monitoring of potentially cancerous oral lesions by primary care practitioners to have improved early detection and ultimate diagnosis of oral cancer.<sup>1</sup> A similar system could be adapted in the current health climate, with patients taking photos of lesions found in their own mouth (assisted perhaps by a household member) and emailing them to their dental practice for review. In order to ensure the oral cavity is imaged satisfactorily, perhaps video may be an option, online facilities whereby a practitioner could ask the patient to move their tongue, swallow, or improve the angle of view to enable more detailed assessment.

When a fast track referral is received by OMFS, it can be reviewed by an experienced member of the team. If the referring clinician is able to obtain any photographs from the patient, they may be used, in addition to an ENT UK validated telephone risk stratification system which enables an evidence-based risk assessment to be made.<sup>2</sup> Ongoing management of potential cases, whilst challenging, can then be arranged according to this risk.

We implore dental professionals to continue their rigorous efforts to detect oral cancer, by asking patients to phone in to their practice if they detect unexplained oral ulceration which persists longer than three weeks, a persistent lump in their neck, or notice a red or white patch anywhere in the mouth. Additional red flag symptoms would include changes to the voice, unintended weight loss and pain or difficulty swallowing. Despite the current uncertainty, our duty to patients still involves aiding their referral to specialist services should it become necessary.

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## References

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## A potential third infection route

Sir, so far, we are aware of two main routes of transmission SARS-Cov-2: infection by contact with a contaminated object and inhalation of droplets emitted by sneezes and coughs. However, there may be a third infection route of microdroplets, which can remain in the air for perhaps 20 minutes or more, particularly where ventilation is poor. Recent experiments have been undertaken in the Kyoto Institute of Technology and the Japanese Association for Infectious Disease. Laser beams and high sensitivity cameras, which can capture microdroplets 0.01 micrometres in width, have been used to analyse the aftermath of sneezes and coughs. Droplets fall relatively quickly, but small particles (less than 10 micrometres in width) can remain in the air for prolonged periods.

Similar experiments have been undertaken assessing close range conversations where microdroplets can be seen generated during speech, particularly loud conversational speech or heavy breathing (such as after a jog). Stagnation of microdroplets can be minimised with good ventilation and increased air circulation. It is not known what volume of microdroplets can lead to infection, but the possibility that such microdroplets may transmit the virus cannot be ruled out. The risk is that it may be spread by speaking to someone, or potentially being in an area

where others have been speaking, particularly if ventilation is poor, and masks are not being worn. Consider the areas in hospitals where most conversations take place, such as offices or corridors, many with inadequate or no ventilation. The implications of this data will become clearer as our understanding improves, but in the meantime, extra caution may be better than the alternative.

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## Saliva testing for COVID-19?

Sir, Reverse Transcription-Polymerase Chain Reaction (RT-PCR) is the most commonly used molecular diagnostic test for the detection of COVID-19 in biological samples but no universally accepted test is currently available, with several countries adopting different test strategies.<sup>1</sup> The selection of proper location/test site for sample collection is very important to obtain reliable test results, the most commonly used being naso- and/or oropharynx swabs (NOS).<sup>2</sup>

Although these are relatively easy to collect and test results are highly sensitive, there are limitations related to sample collection and healthcare personnel safety. However, use of saliva as an alternative to NOS for detection of COVID-19 has been suggested.<sup>3,4</sup> Using saliva samples has a number of 'clinical advantages'; it is less invasive and more convenient to patients as compared to NOS or blood samples<sup>4</sup> (especially desirable in multiple testing for disease monitoring). Secondly, with clear instructions, patients can collect saliva themselves, thereby minimising the risk of virus transmission to healthcare personnel and avoiding use of personal protective equipment.

This potential use of saliva seems scientifically reasonable as it has been shown to contain live COVID-19 viruses<sup>3</sup> possibly containing a pool coming from the lower respiratory tract, nasopharynx and infected salivary glands (for some of the coronaviruses, infection of salivary glands occurs very early in the disease process).<sup>4</sup> Unlike the other SARS virus diseases, the content of salivary COVID-19 (viral load) has been shown to be highest during the first week after symptom onset.<sup>5</sup> This emphasises the role of saliva as a potential source of viral transmission and, as it could be detected in the saliva as long as 25 days after the onset of symptoms, suggesting its potential use for monitoring viral clearance.<sup>5</sup>