CASTING LIGHT ON THE CHALLENGES OF ILLUMINATING ENT EXAMINATIONS DURING THE COVID-19 PANDEMIC

Editor

Protecting healthcare staff from SARS-CoV-2 infection is a crucial element of the Covid-19 pandemic response and personal protective equipment (PPE) is vital in this respect. A high viral load of SARS-CoV-2 virus has been found in the nasal cavity and oropharynx of infected individuals, including patients with few or no symptoms[1]. Examinations of the ear, nose and throat (ENT) have the potential to release aerosols within close proximity of the clinician. Public Health England (PHE) recommend a full-face shield or visor or polycarbonate safety spectacles, as well as a filtering face piece class 3 (FFP3) respirator for aerosol generating procedures (AGP)[2]. ENT UK recommend full PPE for examinations and interventional procedures of the upper aerodigestive tract given that they are potential AGPs[3].

We have found that it is difficult, and not always possible, to use a full-face visor with a headlight for ENT examinations or procedures given that they both attach to the same area on the forehead. We have created protective goggles with an integrated LED light to overcome this problem (Figure 1). An LED light attached by cable to a rechargeable battery pack was sourced from an online retailer and the light was attached to protective goggles. A small hole was made on the top of the goggles to allow the LED light to slot into place and a screw on the light was pushed through the goggle material for a secure attachment. The goggles and LED light can be wiped down after use.

Figure 1:
protective goggles with integrated LED headlight worn with full PPE

Where these protective googles are unavailable, a peritonsillar abscess may be drained using a pen torch and tongue depressor. A tongue depressor is taped onto the end of a disposable pen torch. (Figure 2). This allows for tongue depression and targeted illumination of the peritonsillar area with one hand. We have devised a similar technique for nasal cautery. A silver nitrate stick taped to a disposable pen torch allows for targeted illumination of the nasal septum and simultaneous application of silver nitrate whilst using a nasal speculum in the other hand (Figure 3). Both techniques allow the clinician to use full PPE, including a visor or goggles, without the need for a headlight.

It is crucial that as clinicians we use adequate PPE to protect ourselves during ENT examinations and procedures. We must continue to do this as we return to elective practice whilst the SARS-CoV-2 virus is still in circulation within the community and a vaccine is not yet available. We must use adequate PPE for all patients in an elective setting because we know that people can be infected with SARS-CoV-2 and remain asymptomatic[4]. Current screening measures for detecting SARS-CoV-2 infection in patients are also not completely reliable. Reverse-transcriptase polymerase chain reaction (RT-PCR) performed on nasal and pharyngeal swabs has been reported to have a false negative rate of up to 29%[5].

Figure 2:
(a) disposable pen torch attached to wooden tongue depressor for use in draining a peritonsillar abscess (b) disposable pen torch attached to 75% silver nitrate stick for use in nasal cautery

The two techniques that we describe above are inexpensive, easy to set up and allow for adequate use of PPE for ENT examinations and procedures. They are also a potential measure of preserving PPE supplies during a time of potential shortages of PPE for clinicians.

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Erratum:

A Short History of Occupational Disease:
1. Laboratory-acquired Infections. UMJ, 2021:90(1):28-31. Table 2 The risk figure for Brucellosis is 641/100,000 microbiologists NOT 64.1 as stated in the table.