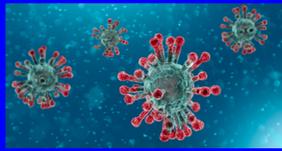


Setting up a dedicated Nasendoscope/biopsy clinic during COVID-19: Wrexham Maelor Experience



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Introduction

Prior to the COVID-19 pandemic, potential aerosol generating procedures (AGPs) such as Fiberoptic nasal endoscopy (FNE) were an everyday part of the ENT clinic often performed without personal protection equipment (PPE). It is now known that aerosols generated from coughing or sneezing may be contaminated with Sars-COV-2 potentially infecting staff and patients. This led to significant changes in otolaryngology working practices for example replacement of face-to-face consultations with telephone consultations and nasendoscopic assessment reserved for urgent suspected cancer (USC) cases where appropriate PPE is worn¹. There remains a need for innovative approaches to cope with rising clinical demand.

Methods

A dedicated USC nasendoscopy/biopsy clinic was trialled in an endoscopy suite room since June 2020. A prospective record was kept of all patients seen over a 10 week period (n=199). We discuss our clinical pathway, the practicalities and challenges faced and give a summary of our results.

Clinical Pathway (Figure 1)



Practicalities (Clinic set-up)

After approval from hospital estates we chose an endoscopy suite attached to our ENT theatre (Figure 1). This suite was isolated from the main hospital and had the benefit of balanced ventilation system (Figure 2) with 15 air-changes-per-hour (ACH). This meant 99% of airborne contaminants are removed after 18 minutes if an AGP has occurred⁴. We were able to use a rear fire-exit door for patient access from the car-park (Figure 1). These factors allowed us to see patients sooner without the need for 2 weeks self-isolation, it also reduced the risk of patient's contracting COVID-19 during their hospital visit. On average we examined 3-4 patients per session.

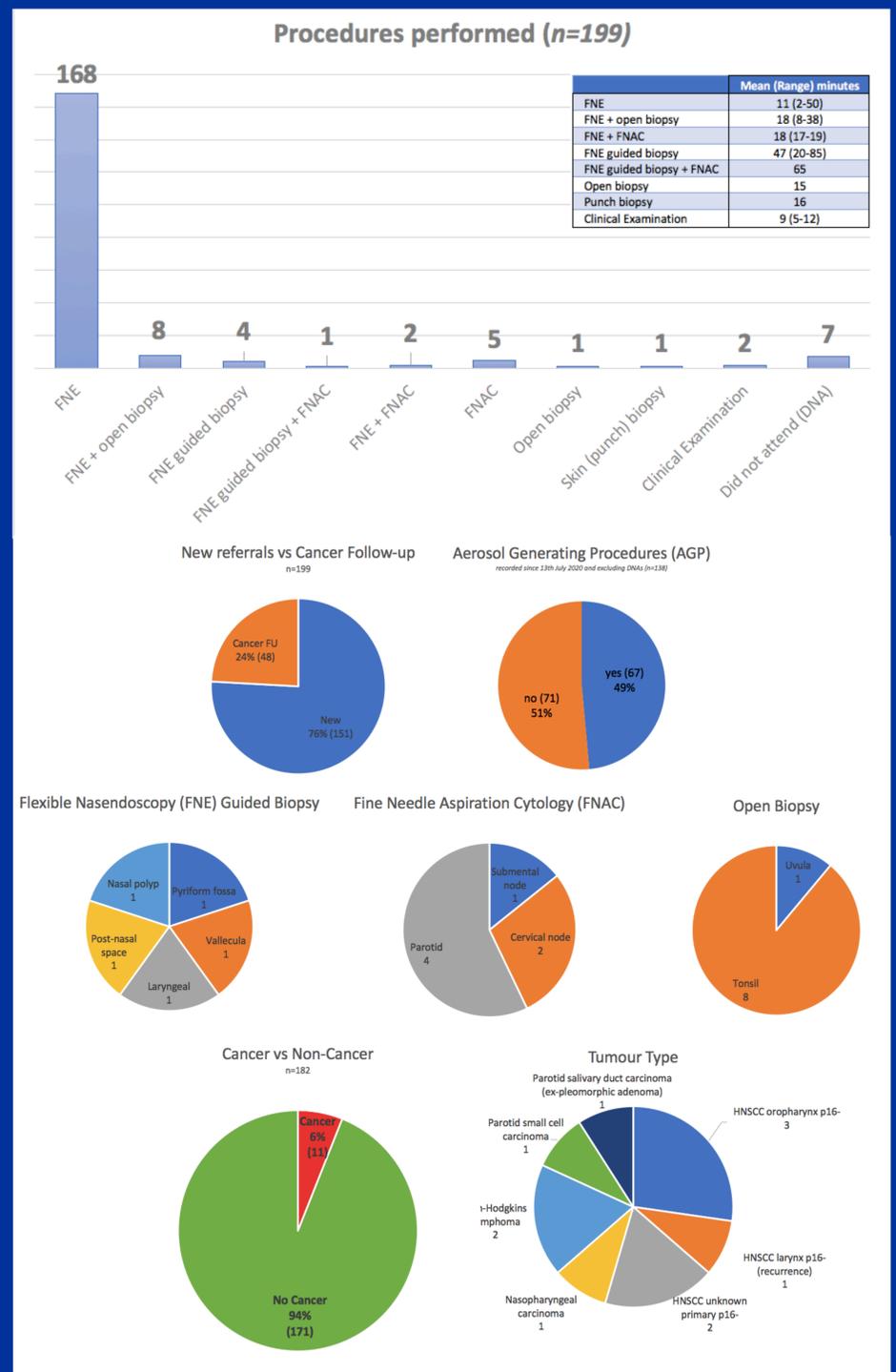


(Figure 2) – Balanced Ventilation in endoscopy suite room

Challenges

One drawback of our clinic model is that planning appointment times can be difficult due to the possibility of aerosol generation with each procedure. If aerosol generation occurs the endoscopy room has to be left to rest for 18 minutes before the next patient can attend due to the risk of cross-contamination⁴. Having an additional scope room to rotate with would avoid this delay and increase capacity. A second drawback is that it is difficult to predict which patients require a biopsy and this can therefore cause delays.

Results



Conclusion

Whilst COVID-19 has undoubtedly resulted in a clinical backlog and suboptimal care, it has also encouraged development of innovative solutions to circumvent these. The otolaryngology landscape post-COVID is likely to permanently change but this may also bring lasting clinical benefits such as a reduction in the need for general anaesthetic airway endoscopy and biopsy. We suggest our nasendoscope/biopsy clinic may help minimise disruption to clinical care whilst maintaining patient and staff safety during the COVID-19 pandemic.

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