

## EUROPEAN ASSOCIATION FOR CRANIO-MAXILLO-FACIAL-SURGERY

## **NEWSLETTER – SUMMER 2019**

## ADVANCES IN AIRWAY MANAGEMENT FOR HEAD AND NECK SURGERY Dr David Garry, MA (Cantab) MB BChir MRCP FRCA FFICM Consultant in Anaesthetics and Intensive Care Medicine Oxford University Hospitals NHS Foundation Trust



Airway management for head and neck surgery proposes unique challenges for the anaesthetist, such as establishing and maintaining a complicated shared airway, in the context of increasing surgical complexity and increasing patient co-morbidities. Recent and ongoing advances in airway management focus on the outcome that matters most - a safer journey for the patient in the pre-, peri- and post-operative period.

More than 40% of cases reported in NAP4 were associated with disease processes of the upper airway or head and neck. The old adage "proper planning and practice prevents painfully poor

performance" (the 7 Ps), is none truer than in airway management in this patient population. Airway checklists and passports are of great value for team planning including non-clinical skills, such as human factors that play a vital role in airway emergencies, where the surgeon and anaesthetist share an often-complicated airway.

High flow nasal oxygen (HFNO) is finding increasing favour in head and neck anaesthesia. It has been shown to vastly increase apnoeic oxygenation time in head and neck patients and can convert a difficult intubation from a hurried process into a more controlled event. HFNO is becoming more prevalent for fibre-optic intubation (both awake and asleep), as it can reduce the risk of hypoxaemia while optimising endoscopic conditions. It is also finding favour for surgical endoscopic procedures where it can provide an unobstructed view of an immobile larynx, while maintaining oxygenation for the duration of surgery.

Video laryngoscopy (VL) is being increasingly used in all areas of anaesthesia, and although it is not currently supported by robust evidence in head and neck cancers, it should be readily available in all clinical areas that care for these patients. The use of a VL with a curved blade can provide a clear image of a glottic view that would otherwise be unobtainable by conventional laryngoscopy.

Head and neck surgery can also present unique challenges for airway safety in the post-operative period. The use of an airway passport can provide a reliable focal point to initiate and document communication and handover with the clinical team providing post-operative care. Airway re-intubation after complex head and neck surgery can present predictable challenges and should be mitigated for. The increasing popularity of staged extubation sets should be considered, as they can help provide a reliable route for both oxygenation and re-intubation in the event of a failed extubation.