

Wisdom tooth extraction under general anaesthesia

YES

The challenge of airway management for wisdom teeth extraction is to protect the lower airway from upper airway surgical debris without compromising surgical access. This has been traditionally achieved using nasotracheal intubation with a throat pack but this carries well documented comorbidities of nasal trauma and tracheal intubation.

The flexible laryngeal mask airway (FLMA) avoids nasal tube complications but does it provide airway protection and adequate surgical access? Quinn et al (1996) studied 100 patients randomly allocated to nasal tube or FLMA and found no airway soiling or surgical access problems. Two patients with FLMAs had partial airway obstruction following mandibular pressure from the surgeon but this was easily resolved.

Keller and Brimacombe (1999) and Buckham et al (1999) confirmed protection by FLMAs against large quantities of upper airway fluid, and showed the seal was adequately maintained through a full range of head positions which may be encountered in this type of surgery.

Evidence for safe use of the FLMA is overwhelming but its use is resisted for two reasons. First accurate placement is required and some anaesthetists are not fully comfortable with this. This can be easily overcome with training after which accurate placement is universal. Second surgeons feel their access is compromised. This requires more exposure of surgeons to the technique so they can feel confident that lateral movement of the FLMA intraoperatively is safe and will cause no airway compromise.

Use of the FLMA is safe and effective in this setting and carries several

advantages over nasal intubation. It is time to make it standard practice.

Jim Down

Research Registrar

Centre for Anaesthesia

University College London

Buckham M, Brooker M, Brimacombe J, Keller C (1999) A comparison of the reinforced and standard LMA: ease of insertion and the influence of head and neck position on oropharyngeal leak pressure and intra-cuff pressure. *Anaesth Intens Care* **27**(6): 628-31

Keller C, Brimacombe J (1999) The influence of head and neck position on oropharyngeal leak pressure and cuff position with the flexible and the standard laryngeal mask airway. *Anaesth Analg* **88**: 913-6

Quinn AC, Samaan A, McAteer EM, Moss E, Vucevic M (1996) The reinforced laryngeal mask airway for dento-alveolar surgery. *Br J Anaesth* **77**(2): 185-8

NO

The ideal anaesthetic for wisdom tooth extraction provides a stable, unobstructed airway, protects the lower airway from aspiration, has minimal interference with surgery and a low complication rate.

Endotracheal nasal intubation can be achieved rapidly and safely following intravenous induction with propofol and alfentanil. A nasotracheal tube is well tolerated by the spontaneously breathing patient without recourse to large doses of anaesthetic. A tracheal tube can either be inserted blind or with direct laryngoscopy in little more time than it takes to insert an LMA. It provides a more reliable airway than an LMA as it is easily secured without impinging on the surgical field and less likely to be compromised by head or neck movement

THE DILEMMA

Should use of the reinforced LMA now be standard practice during wisdom teeth extraction under general anaesthesia?

(Quinn et al, 1996; Young, 1991). Although more difficult to master than LMA insertion, blind nasal intubation is well within the abilities of most anaesthetists and nasal trauma and sore throat can be minimized with the use of small tubes and gentle technique. Problems associated with suxamethonium administration are no longer an issue (Alcock et al, 1993).

Nasotracheal intubation in anatomically normal patients also provides an excellent fibreoptic intubation training opportunity.

The combination of a cuffed tracheal tube and throat pack gives excellent lower airway protection against soiling with blood, surgical debris and irrigation fluid.

The real advantage of nasal intubation is optimal surgical access. Wisdom tooth extraction under general anaesthetic is generally undertaken in patients where the surgeon anticipates difficulty. Access to the posterior oral cavity can be difficult even without an oral airway in situ and if restricted may lead to increased surgical morbidity (Robinson, 1994).

Wisdom tooth extraction with an LMA makes surgery more difficult, carries a higher risk of intraoperative airway obstruction and removes training opportunities, challenging its routine use.

V Mitchell

Consultant Anaesthetist

University College Hospitals London

Alcock R, Peachey T, Lynch M, McEwan T (1993) Comparison of alfentanil with suxamethonium in facilitating nasotracheal intubation in day-case anaesthesia. *Br J Anaesth* **70**(1): 34-7

Robinson PD (1994) The impacted lower wisdom tooth: to remove or to leave alone? *Dent Update* **21**(6): 245-8

Young TM (1991) The Laryngeal Mask in dental anaesthesia. *Eur J Anaesthesiol Suppl* **4**: 53-9

Anaesthetic and critical care dilemmas are coordinated by **Dr Rob Stephens** and **Dr Mike Grocott**, Research Fellows at the Centre for Anaesthesia, UCL, London