HOT TOPIC 1: May 2014

Title:

• How do you position your patients at the end of anaesthesia: lateral or supine?

• What is the reasoning for your practice?

• Do you change your practice for tonsillectomy patients?

EDITORIAL

Firstly, many thanks to all of you who have taken the time to submit comments and opinions for our first 'hot topic'. You will be pleased to hear, no doubt, that I will not be providing comment on all the topics once we close them but I am kicking things off.

What is clear is that there is a variety of practice regarding the 'optimal' recovery position for children. Whenever there is such variance amongst experienced practitioners, it usually means that whatever we do doesn't alter outcome too dramatically. Two factors are at play; the risk of aspiration and the ease of airway maintenance. Let us consider the former first.

Aspiration of blood or vomit is relatively rare. Rob Walker (1) found that the overall incidence was approximately 2 in 10,000 in a recent UK prospective survey. Even when it does occur, at least in paediatrics, aspiration rarely goes on to cause further complications with approximately a quarter of cases needing ventilation and all making a full recovery. A large study by Borland (2) from Pittsburgh some years ago echoes these findings with an overall incidence of aspiration of 0.1% in over 50,000 paediatric anaesthetics. This is in contrast to adult practice where there is an associated mortality along with a higher incidence.

There is a perception that airway maintenance may be easier in the lateral position although I can find little evidence to support this in the literature.

There are very good reasons why the lateral decubitus position is advocated in a wider context. First aid and resuscitation courses advocate its use but often in these settings trained airway support with adjuncts, tipping trollies and suction are not all readily available !

As far as making a special case for tonsillectomies: I am sure that in the days before diathermy dissection and effective prophylactic anti-emetic regimes, it made a lot of sense to favour a lateral head down position for recovery since the incidence of secondary haemorrhage and vomiting was undoubtedly higher than it is now. Although an entirely separate debate, the fact that many now conduct these anaesthetics using LMAs, is testament to the confidence that the aspiration risk is low. The 'no touch' technique for extubation that is referenced by a couple of respondents seems favourable. This involves turning the child into the lateral

position before discontinuing the volatile and with no further stimulation until awake extubation (3). However this may not be that practical in terms of timely list turn around.

In paediatrics, in general, it is much easier than it is in adult practice to turn the patient into a lateral head down position with the immediately available staff in recovery in the event of a threatened vomit. This accounts for at least one of our respondents favouring prophylactically turning larger patients in theatre where there are more willing helpers available.

So, in summary, it probably doesn't make too much difference in most cases. If there is a high risk of passive regurgitation or aspiration and/or the patient is larger, it might be prudent to recover them on their side from the outset.

I hope that this summary has given you some (regurgitated) food for thought.

The Borland reference below contains a full text pdf link for those interested in reading more. This could be added to your portfolio along with a short reflective paragraph !

Please join in the current debate by e-mailing the hot topics link.

1.Pulmonary aspiration in pediatric anesthetic practice in the UK: a prospective survey of specialist pediatric centers over a one-year period. Walker RW. Paediatr Anaesth. 2013 Aug;23(8):702-11. doi: 10.1111/pan.12207. Epub 2013 Jun 13.

PMID: 23763657

2.J Clin Anesth. 1998 Mar;10(2):95-102. Pulmonary aspiration in pediatric patients during general anesthesia: incidence and outcome. Borland LM1, Sereika SM, Woelfel SK, Saitz EW, Carrillo PA, Lupin JL, Motoyama EK.

Full text pdf here:

http://ether.stanford.edu/library/pediatric_anesthesia/childhood%20diseases/mendelson%20syn%20in%20ped.pdf

3.The incidence of laryngospasm with a "no touch" extubation technique after tonsillectomy and adenoidectomy.

Tsui BC, Wagner A, Cave D, Elliott C, El-Hakim H, Malherbe S. Anesth Analg. 2004 Feb;98(2):327-9, table of contents.

PMID: 14742363