

URI's Do we really Care – Yes!

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The tendency in recent years has been to dismiss the importance of many concepts that were held to be true by earlier generations. This has now extended to the problem of the child with an URI (or a recent history of URI) who presents for general anesthesia. You will probably hear Dr Yaster claim(I hope!)that it really does not matter that much anymore – we can readily deal with any complications that might come up! So we should go ahead!

Is this really so? Certainly any child who really urgently needs an anesthetic must have one even if he has an active URI – we all agree on that point. We will proceed with due care and choose techniques optimal for the URI. How about the child who does not really need the anesthetic today – the child who could easily wait until 2 weeks later and get over his cold? Should we take on the increased possibility of complications, the remote likelihood of a stormy anesthetic course, and inflict the discomfort of recovering from anesthesia with a cold! Sure we will inconvenience the parents, might even cause them some useless expenses and the loss of a working day if we cancel out; we could however have checked with them yesterday and likely prevented these problems by deferring the case at that time! When all is considered is it not sensible to consider that a healthy child is a better candidate for anesthesia than a child with an URI?

What are the real well-documented problems of anesthetizing a child with an URI?

- a. Laryngospasm is more likely to occur¹ (and laryngospasm is the commonest respiratory system cause of perioperative cardiac arrest²).
- b. Desaturation occurs more rapidly with any interruption of ventilation³.
- c. Desaturation is more likely to occur during transportation to the PACU⁴.
- d. Desaturation is more likely to occur in the PACU⁵.
- e. Some children may have been given over the counter medications by their parents and these may cause serious complications⁶.
- f. Very, very rarely the symptoms of the “URI” might be associated with something much more sinister – e.g. a silent cardiomyopathy⁷.

So, if you believe in the Yaster approach – go ahead- be prepared for complications and deal with them if you have to. Alternatively, plan well ahead, if the child has a cold suggest at an early stage that perhaps “In order to take the best possible care of your little child” we should wait a couple of weeks until he or she is all better. Then we can really feel that we have practiced optimal medicine.

1. Flick RP. Wilder RT. Pieper SF. van Koeverden K. Ellison KM. Marienau ME. Hanson AC. Schroeder DR. Sprung J. Risk factors for laryngospasm in children during general anesthesia. *Paediatric Anaesthesia*. 18(4):289-96, 2008
2. Bhananker SM. Ramamoorthy C. Geiduschek JM. Posner KL. Domino KB. Haberkern CM. Campos JS. Morray JP. Anesthesia-related cardiac arrest in children: update from the Pediatric Perioperative Cardiac Arrest Registry. *Anesthesia & Analgesia*. 105(2):344-50, 2007
3. Kinouchi K. Tanigami H. Tashiro C. Nishimura M. Fukumitsu K. Takauchi Y. Duration of apnea in anesthetized infants and children required for desaturation of hemoglobin to 95%. The influence of upper respiratory infection. *Anesthesiology*. 77(6):1105-7, 1992

4. Rachel Homer J. Elwood T. Peterson D. Rampersad S. Risk factors for adverse events in children with colds emerging from anesthesia: a logistic regression. *Paediatric Anaesthesia*. 17(2):154-61, 2007
5. DeSoto H. Patel RI. Soliman IE. Hannallah RS. Changes in oxygen saturation following general anesthesia in children with upper respiratory infection signs and symptoms undergoing otolaryngological procedures. *Anesthesiology*. 68(2):276-9, 1988.
6. Anonymous. Cough-and-cold medications in children: are they causing unexpected deaths?... *Child Health Alert*. 26:3, 2008
7. Jones AG. Anaesthetic death of a child with a cold. *Anaesthesia*. 48(7):642, 1993