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References

1. Gupta B, Kaur M, Sawhney C, D'Souza NI. Impacted toothbrush in the oropharynx: a challenging airway. *Pediatric Anesthesia* 2010; **20**: 964–6.
2. Paterson NA. Management of an unusual pediatric difficult airway using ketamine as a sole agent. *Pediatric Anesthesia* 2008; **18**: 785–8.

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Anaphylaxis to dye during breast surgery

Dr Robinson's letter highlighting the potential adverse reactions associated with Patent Blue V (Guerbet, Cedex, France) [1] is a useful reminder to anaesthetists of an adverse drug reaction that they may not have administered but will be expected to manage.

The use of Patent Blue V dye is becoming more widespread since the publication of the ALMANAC trial [2]. We have been using Patent Blue V dye for almost 10 years and have managed many of the complications of its use [3, 4]. Over 3000 patients have been exposed to this drug and we have found 30 patients to date (approximately 1%) who have experienced severe anaphylaxis with cardiovascular collapse; this is similar to the 0.86% incidence from the ALMANAC and NEW START datasets [5]. The incidence of anaphylactic reactions during anaesthesia is estimated at between 1 in 3500 and 1 in 13000 [6]; with neuromuscular blocking drugs responsible for roughly 60%

of reactions, followed by exposure to latex and antibiotics at around 15% each [7]. Our 1% rate of reaction therefore potentially makes Patent Blue V the most common drug causing severe anaphylaxis in the operating theatre environment.

We have previously described a number of adverse effects [3, 4] including extreme pallor and the occurrence of large blue cutaneous wheals that may be a cause of concern, particularly to recovery nurses. However, it is the severe, life threatening cardiovascular collapse that we would particularly like to highlight. Whilst most anaphylactic or anaphylactoid reactions to anaesthetic drugs usually occur immediately after intravenous administration, we would stress that most reactions to Patent Blue V (which is administered subcutaneously or intra dermally by the surgeon) do not occur so quickly. Our experience is to find progressively severe hypotension occurring 20–30 min after Patent Blue V injection. This delayed onset has on occasion led to significant delay in the correct diagnosis being made. Once the diagnosis has been made, intravenous adrenaline 1:10 000 is very effective at supporting the circulation. We have also found that the early administration of high-dose intravenous steroids (we use 1g methylprednisolone) is effective at reversing the cardiovascular collapse within 20 to 30 min of administration.

Finally, although we have seen cutaneous blue wheals and cardiovascular collapse either in isolation or together, we have not seen any respiratory complications such as bronchospasm. In our experience, we have only ever seen these reactions following cutaneous injection, and interestingly never following the intra dermal injections for melanoma sentinel lymph node biopsy. We would be interested to hear whether other anaesthetists have had similar experiences when using this dye.

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References

1. Robinson L. Anaphylaxis to dye during breast surgery. *Anaesthesia* 2011; **66**: 841–2.
2. Clarke D, Khonji NI, Mansel RE. Sentinel node biopsy in breast cancer: ALMANAC trial. *World Journal of Surgery*. 2001; **25**: 819–22.
3. Mullan MH, Kissin MW, Deacock SJ, Quiney NF. Severe allergic reactions whilst localising the sentinel lymph node with patent dye: a cautionary tale. *European Journal of Surgical Oncology* 2000; **26**: 305.
4. Mullan MH, Deacock SJ, Quiney NF, Kissin MW. Anaphylaxis to patent blue dye during sentinel lymph node biopsy for breast cancer. *European Journal of Surgical Oncology* 2001; **27**: 218–9.
5. Barthelmes L, Goyal A, Newcombe RG, McNeill F, Mansel RE. Adverse reactions to patent blue V dye- The NEW START and ALMANAC experience. *European Journal of Surgical Oncology* 2010; **36**: 399–403.
6. Laxenaire MC, Mertes PM. Anaphylaxis during anaesthesia. Results of a two-year survey in France. *British Journal of Anaesthesia* 2001; **87**: 549–58.
7. AAGBI Safety Guideline. *Suspected Anaphylactic Reaction Associated with Anaesthesia*. London: The Association of Anaesthetists of Great Britain and Ireland, 2009.

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Large retroperitoneal haematoma: an unexpected complication of ilioinguinal nerve block for inguinal hernia repair

A 71-year-old man underwent an elective open repair of a right inguinal hernia. He had a history of central retinal vein thrombosis and was taking regular aspirin and dipyridamole. Only the aspirin had been stopped a week