Suxamethonium chloride pre-filled syringes SALG Chairs letter

The Safe Anaesthesia Liaison Group (SALG) established a working party at the beginning of 2024 to examine the causes of medication error in anaesthesia, which has identified the implementation of pre-filled syringes as its top priority. Medication error in anaesthesia, in particular neuromuscular blocking drugs, is a longstanding patient safety issue. A design-engineered solution to drawing up and labelling errors, pre-filled syringes convey the best risk mitigation for these errors, alongside their other advantages.

Background

An incident recently occurred where suxamethonium chloride 100 mg was inadvertently given to the patient during caesarean section under epidural anaesthesia. You probably know of similar incidents which have been occurring ever since suxamethonium chloride was introduced in 1952. The National Audit Project 5 (NAP5) on 'Accidental awareness during General Anaesthesia in the UK and Ireland reported six patients harmed by human factor errors with suxamethonium chloride. Three cases involved labelling errors during manual syringe preparation and three cases involved 'syringe swaps' from confusion with syringes of fentanyl andantiemetic.
https://www.nationalauditprojects.org.uk/downloads/NAP5%20full%20report.pdf (Page 114 - 115)

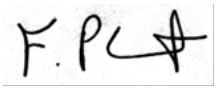
Recommended action

SALG are now recommending that all hospitals consider pivoting from purchasing suxamethonium chloride in ampoules to ready to administer (pre-filled) syringes.
There are a number of options available for purchase of suxamethonium chloride in this format, including compounded syringes from a variety of distributors. A manufactured prefilled syringe of suxamethonium chloride is also commercially available, which contains 100 mg suxamethonium chloride in a 10 ml syringe. This is currently available commercially but as yet unlicensed for the UK market.

We would recommend that any pre-filled suxamethonium chloride syringe purchased must be correctly labelled using ISO26825 red colour. A larger size, such as 10ml would reduce the likelihood of syringe swaps with 2 ml syringes of fentanyl, anti-emetics, or midazolam.

We do hope you will support this course of action as we believe this is a great opportunity to improve both patient safety and our own working environment. Please contact us at admin@salg.ac.uk if you have any further questions or suggestions.

Yours sincerely



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