

Friday 31 May 2024

Professor Matthew Sabin Group Director Medical Services and Clinical Governance 181–183 Wattletree Road Malvern VIC 3144

Via email: msabin@cabrini.com.au

## Dear Professor Sabin

## Neuraxial anaesthesia protocols and patient safety

Thank you for your letter of March 28<sup>th</sup> regarding your protocols and how they relate to neuraxial anaesthesia, safe drug administration, and labelling standards.

In anaesthesia practice, there are many drug drawing up and administration situations where injecting the wrong drug can have critical consequences. Neuraxial anaesthesia is one of those, as your detailed processes recognise. ANZCA *PG51(A) Medication Safety* is designed to advise on processes, which minimise this risk and, accordingly, align with national labelling standards.

## **Skin preparation**

We agree strongly with the principle of not allowing the skin preparation fluid to contaminate the area of the sterile field where drugs and needles are placed. Regarding your skin disinfection process for neuraxial blocks (epidurals or spinals), the process outlined, if carried out correctly, should achieve the aim. Other solutions to be considered, however, include avoiding free liquid prep altogether by using alcoholic chlorhexidine swabsticks. This approach requires another practitioner (e.g. the anaesthetic nurse) to apply the skin prep or the proceduralist to do so before gloving and gowning.

It is reassuring to note that no incidents have occurred, and that the procedure, as described, is followed meticulously on all occasions. It was, however, a galley pot with free liquid chlorhexidine (placed on the sterile setup) that contributed to the terrible outcome for Grace Wong.

## Syringe labelling

The steps, as you describe them for managing the local anaesthetic for skin infiltration and then for neuraxial administration, do not comply with the ANZCA recommendations and National Standards.

There are many circumstances in practice where a second (or third) drug may need to be in a syringe on the sterile field. These include: the need for more skin local to improve comfort or to make an attempt at a new level; the drawing up of saline for loss of resistance for an epidural; the use of a test solution with adrenaline; and the use of both spinal and epidural local (to prime/test) in CSE, etc. Therefore, labelling of syringes should be routine and undertaken in some way.



In many hospitals, sterile preprinted labels that fit on a 2ml or larger syringe are readily available and do not obscure the graticule on the syringe barrel. Also, in practice, for spinal anaesthesia the syringe is often filled with the planned volume/dose to be administered and so there is no need to see the graticule, although seeing the solution in the syringe (for birefringence) is still possible. Any larger syringe is easily labelled likewise. The use of sterile marker pens is also possible.

One point for clinical practice, which is consistent with ANZCA guidelines, is that in this situation (neuraxial anaesthesia), not every component drug in the syringe holding the drug(s) for spinal or epidural injection need be on the label on the syringe – only the primary drug as long as it is unique to the set-up. Examples would be the skin local, which could have a generic 'local anaesthetic' grey label, the spinal local would have a '0.5% bupivacaine' label (even if also containing fentanyl or clonidine), the epidural loss of resistance syringe would have saline and be labelled '0.9% saline' and/or the epidural local injectate would have a 'ropivacaine' label.

These labelling strategies do not mitigate all possibilities for error of course, however, they are considered best practice, straightforward and, therefore, in the patient's best interest.

Yours sincerely,

quinerland

Associate Professor Joanna Sutherland Chair, Safety and Quality Committee