

Neuraxial skin preparation....

time to rethink applying the Pink!

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Introduction

- Skin preparation guidelines for neuraxial block are focussed on prevention of infection and arachnoiditis, both very rare catastrophic events¹.
- The 'spray, wipe, spray' application method of Hydrex™ Pink (Ecolab) is commonplace.
- Chemical burns to women from this practice could be more common than previously understood², estimated institutional prevalence 1/1000



Case report

- 32 year P1 woman, BMI 33 had an epidural inserted 9 hours into labour.
- When her back was sprayed with Hydrex™ she complained of pain, exacerbated when the area was wiped and resprayed.
- Catheter insertion was uneventful and it was secured with a LockIt Plus®, Tegaderm™ and Leucoplast® Hypafix®.
- Routine follow up revealed an area of skin damage over her epidural insertion site consistent with a chemical burn and dressing removal damage (Figure1).



Figure 1. Skin damage epidural site

Investigation

- We were reassured by the manufacturer's quality controls that the appropriate mixture was in the bottles. Bottle/woman usage was untraceable in our system.
- Allergy testing was negative.
- Institution investigation revealed one similar case and two others of skin blisters in a 'drip cake' pattern around the natal cleft.
- Observation of typical Hydrex spray application revealed coalescing droplets descending to the natal cleft followed by a vigorous wiping of the target area and respraying. The lumbar area was allowed to dry by evaporation but the natal cleft often remained wet allowing prolonged contact when the woman was laid down.
- The incidents were reported to the MHRA.

Discussion

- Labouring women are at increased risk of pressure sores, all NHS settled claims³ for pressure lesions (2000-18) involved epidurals. The role of chlorhexidine is absent from the causation narrative which focuses on mobility restriction.
- Both our women complained of pain when sprayed should be considered a red flag.
- 'Spray, wipe, spray' is embedded practice but work as done is not work as prescribed. The manufacturers of Hydrex™ do not recommend wiping skin. The 2nd spray is perceived as beneficial yet not evidenced or recommended¹.

Recommendations

- Revise skin preparation application guidance
- Consent for skin damage, 'rare event'

