

Audit of Safe Epidural Labelling in a Tertiary Centre in the West of Ireland

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INTRODUCTION

While superb means of providing analgesia perioperatively, epidural infusions are not risk-free. Incidents of medication errors involving epidural infusions are well-documented [1, 2]; be it inappropriate drug administration through an epidural catheter, or inappropriate prescription of medication alongside the epidural infusion.

This risk may be reduced through the use of clear labelling at critical points of error, in keeping with guidelines from the NHS [3] and local policy in our centre.

The purpose of this audit is to assess the completeness of such labelling at Galway University Hospital (GUH) in an effort to prevent such adverse events.

REFERENCES

1. Townley, Kress R. MD; Lane, Jason MD; Packer, Robyn NP; Gupta, Rajnish K. MD Unintentional Infusion of Phenylephrine into the Epidural Space, A&A Practice: Volume 6 - Issue 5 - p 124-126; 2016.
2. Patel, S., Robertson, B. and McConachie, I. Catastrophic drug errors involving tranexamic acid administered during spinal anaesthesia. Anaesthesia, 74: 904-914. 2019.
3. National Patient Safety Agency, National Health Service. Safer Practice with Epidural Injections and Infusions, Ref NPSA/2007/21, 2007.

METHODS

Inpatients with ongoing epidural infusions were assessed on surgical and critical care wards over a period spanning 26th February to 3rd April 2020.

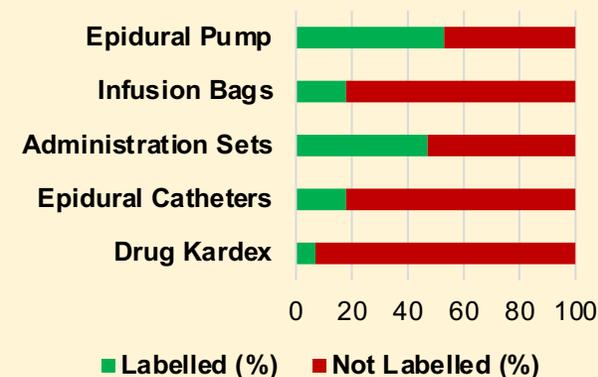
NHS Guidance [3] and local hospital policy recommend labelling five critical sites:
Epidural pump, Infusion bag, Administration set, Epidural catheter, Drug kardex.

Presence or absence of labels at each site was recorded. In total, 17 epidural infusions were audited.

In light of the COVID-19 pandemic and subsequent deferral of planned surgical procedures, rates of epidural infusion use at this institution fell 52% according to local Acute Pain Team data. Analysis however proceeded to most accurately reflect practice during this period.

RESULTS

Disappointingly, labelling was present on little over half of epidural pumps (53%), just 18% of epidural infusion bags, 47% of infusion administration sets, 18% of epidural catheters, and 7% of 15 drug kardexes (2 patients excluded while admitted to Critical Care unit where electronic prescribing supersedes written kardexes used on general wards).



CONCLUSIONS

Performance in meeting this safety standard left much to be desired.

The significance of such thorough labelling may be overlooked by staff routinely managing epidural infusions. However these patients may return to areas where staff encounter epidural infusions less frequently, and where numerous medications and infusions are being prepared and delivered simultaneously.

This exposes our patients risks with potentially devastating consequences.

Staff education and prompting are key interventions to improve the safety of our epidural analgesia.

As planned surgery resumes in GUH, now is an ideal time to intervene, and enable our patients to experience the benefits of epidural analgesia with a greater assurance of safety.