

# EPIDURAL HAEMATOMA: THE AFTERMATH

V Perry-Woodford<sup>1</sup>, E Murphy<sup>3</sup>, M Flannery<sup>2</sup>, S Celera<sup>2</sup>, T Zuze<sup>2</sup>, L Ali<sup>3</sup>

1: Lead Pain Sister 2: Acute Nurse Pain Specialist 3: Consultant Anaesthetist

Department of Anaesthesia, Northwick Park Hospital, London North West Healthcare NHS Trust

## Background

Epidural haematoma is a rare but potentially catastrophic complication associated with epidural catheterisation.<sup>1</sup> Most case reports look at the clinical aspects of an epidural haematoma focusing on risk factors, diagnosis investigations, surgical management and post-operative sequelae. We discuss the aftermath of an epidural haematoma in our trust on the Acute Pain Service (APS).

The definitions given cover a spectrum ranging from insufficient analgesia to catheter dislodgement to any reason for early discontinuation of epidural analgesia.

## Aims & Objectives

1. To create a safe environment for caring for epidurals
2. To devise an intensive and robust epidural training program for nursing staff
3. To evaluate the current practice, training and education of epidurals in our trust

## Methods

### Immediate actions taken at the time of the incident

To restrict post-operative care of all epidural patients to HDU/ recovery. No patients with epidural catheters to be cared on any of the wards.

Urgent training program in the management of epidurals was delivered to a restricted cohort of ward nurses on two

### Intensive training

A programme of intensive epidural training and assessment of competencies was initiated. The training consisted of a PowerPoint presentation outlining physiology of the epidural space, nursing care, side effects and four major complications of an epidural. Training with setting up of epidural pumps, titrating rates and troubleshooting was also delivered. The competencies were assessed in the form of a quiz and a practical test.

### Secondary considerations

Contact was made with other London NHS Trusts to discuss teaching packages and assessment of competencies. Epidural policy was reviewed and revised in accordance with NAP3.

Establishment of link nurses on the ward to increase continuing education and support of ward nurses on a day to day basis.

## Effect on APS

Reduced morale and a sense of failure within APS. Staff shortage within APS further exacerbated by preparation of new competencies and intensive training for the ward nurses.

Substantial increase in the number of APS referrals due to 'epidural phobia' on the wards.

## Main Results

30% of ward nurses passed the test of competency on first attempt.

The remainder had to repeat the test to ensure 100% success.

The question "Do you feel confident in caring for a patient with an epidural" was posed to ward nurses. This question generated a 100% response rate with 75% nurses answering positively.

## Conclusion

Sadly, the epidural service has once again been restricted. This relates to 7 critical incidents relating to lack of basic epidural observations. This is primarily due to a chronic shortage of nurses on the wards, high turnover of staff and reluctance of senior nurses to take on a link role due to excessive workload.

## References

1. Cook TM, Counsell D, Wildsmith JAW. Major complications of central neuraxial block: report on the Third National Audit Project of the Royal College of Anaesthetists. Br J Anaesth 2009; 102: 179-90