

Perfect, OK and not so good epidurals : an audit from a busy DGH

V Perry-Woodford¹, E Murphy,² S Celera², T Zuze², M Flannery², L Ali³

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

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

BACKGROUND

Failure of epidural analgesia is a frequent clinical problem. Estimates of the incidence of failed epidurals are hampered by the lack of a uniform outcome measure.¹

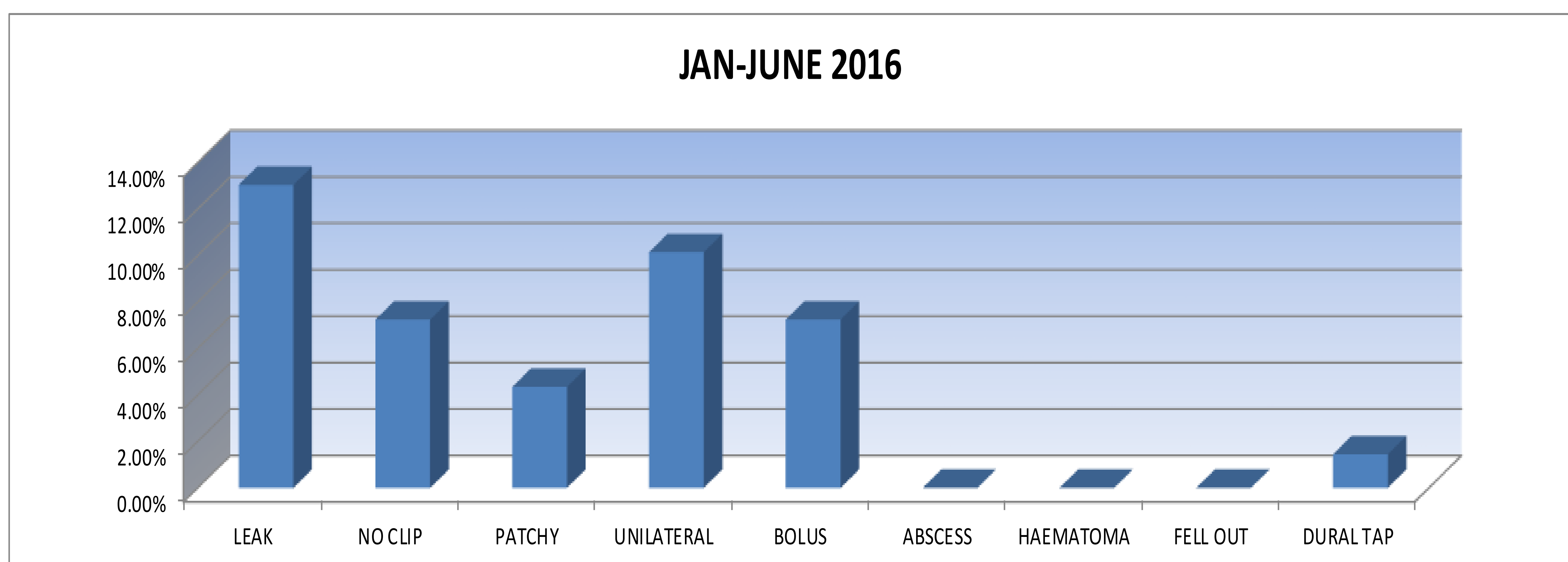
The definitions given cover a spectrum ranging from insufficient analgesia to catheter dislodgement to any reason for early discontinuation of epidural analgesia.

In a heterogeneous cohort of 2140 surgical patients, failure rates of 32% for thoracic and 27% for lumbar epidurals have been described.

We undertake a host of complex surgery in our institution for which an epidural is inserted and used for postoperative pain management.

RESULTS

- Total number of epidurals inserted 79, however epidural catheter was not used postoperatively in 10 patients
 - 52.2% of patients (36/69) receiving epidurals as a sole major treatment modality – **Perfect!**
 - 30.4% of patients (21/69) receiving epidural + PCA due to opioid dependence – **Perfect!**
 - 17.4% of patients (12/69) receiving epidural analgesia + PCA inadequate block - **OK!**
 - Epidural removed at 24 hours (30/69), 25-48hrs (9/69), 49-72hrs (17/69)
 - 10.1% of patients (7/69) unilateral block - **Not so good!**
 - 4.3% of patients (3/69) patchy block - **Not so good!**
 - 13% of patients (9/69) leaking epidural site - **Not so good!**
 - 7% of patients (5/69) epidural fixation device not used - **Not so good!**
 - 0% of patients dislodged epidurals - **Perfect!**
 - 1.4% of patients (1/69) had a documented dural tap – **Not so good!**
- No major complications (abscess/haematoma/total spinal/cardiac arrest) – **Perfect!**



AIMS & OBJECTIVES

Our aim was to evaluate our epidural practice and to compare it to published benchmarks.

We evaluated the efficacy of epidurals, duration of epidural infusion, incidence of leaking and disconnected epidurals and incidence of major complications from epidurals.

METHODS

Epidural follow up charts for all patients who had an epidural inserted between January 2016 and June 2016 were analyzed.

Epidural analgesia efficacy, failure and complications were studied.

CONCLUSION

Epidural was inserted in 79 patients however the epidural catheter was used postoperatively in 69 patients. 82.6% patients had a perfectly working epidural. Of these perfectly working epidurals 30% of patients were electively started on plain bupivacaine and PCA due to chronic opioid dependence. 17.4% patients had an inadequate epidural and needed PCA supplementation.

These figure are well within the reported failure rates of epidurals. Incidence of dural tap was 1.4%. Although there were no cases of epidural catheter dislodgement, in 7% of patients, no epidural fixation device was used.³ There were no major complications from insertion of epidurals. In conclusion the efficacy rate of epidurals was much higher and the complications much lower than published data.

References

¹Failed epidural: causes and management. BJA 2012 10.1093

² Ready LB. Acute pain: lessons learned from 25000 patients. Regional Anesthesia Pain Med 1999. 24: 499-505

³ Clark MX, O'Hare K, Gorringer J, OH T. The effect of the Lockit epidural catheter clamp on epidural migration: a controlled trial. Anaesthesia 201; 56: 865-70