

EP155 **ACHIEVING 'PENG' HIP FLEXION FOLLOWING TOTAL HIP ARTHROPLASTY: A COMPARISON BETWEEN THE PENG AND FASCIA ILIACA BLOCKS IN TOTAL HIP ARTHROPLASTY**

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Background and Aims Early ambulation and initiation of physiotherapy following total hip arthroplasty (THA) are essential in diminishing pain and avoiding complications. This audit compared the effectiveness of two popular blocks: the pericapsular nerve group (PENG) and the fascia iliaca block (FIB). Audit approval was granted by our local audit department without ethics committee approval.

Methods We retrospectively analysed 57 elective patients undergoing THA in University Lewisham Hospital. Patients were divided into two groups: those undergoing PENG (group 1) and those undergoing FIB (group 2). Demographic data, morphine equivalent requirements (MER) at day 1 and 2, earliest mobilisation, hip flexion angles, and numeric rating scores (NRS) were recorded. Data was analysed using SPSS statistical software.

Results Nineteen patients (33.3%) underwent PENG and 38 (66.7%) patients underwent FIB. Patients in group 1 were found to have a significantly greater degree of hip flexion when compared to those undergoing FIB ($p=0.008$). Additionally, patients in group 1 appeared to have near significant lower day 2 resting NRS ($p=0.06$). However, when analysing NRS scores overall there was no significant difference between the two groups. Additionally, there was no significant difference between mean MER doses at day 1 or 2.

Conclusions In patients undergoing THA, addition of a PENG block can significantly improve hip flexion ranges and may improve resting NRS values when compared to those undergoing FIB. We therefore suggest the addition of a PENG block may preserve hip motion and allow early physiotherapy initiation, all of which may lead to improved prosthesis function in the longer term.

Results table- THR audit docx

EP156 **POST DURAL PUNCTURE HEADACHE – DO WE NEED TO BRING AWARENESS**

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Background and Aims Post dural puncture headache (PDPH) is a rare complication of neuroaxial analgesia/anesthesia, estimated to be less than 3%. However, it can impair neonatal care in the post-partum period. The aim of this audit was to evaluate the incidence of PDPH in our obstetric resident department and the need for different treatment options.

Methods Records' review including all obstetric patients submitted to neuroaxial techniques between 2020 and 2021 in our obstetric department.

Results In a total of 5574 neuroaxial techniques performed in pregnant women, 33 were signaled for PDPH (0.59%). Of these, 17 were after an epidural technique, 11 following a sequential technique and 5 after a subarachnoid puncture. Out

of 36 accidental dural punctures (ADP), only 15 presented symptoms of PDPH. Of the total 33 PDPH cases, 29 were initially treated with conservative measures, of which 8 had to escalate to sphenopalatine ganglion block (4 cases), great occipital nerve block (1 case) or epidural blood patch (EBP) (3 cases); The other 4 cases were initially treated with conservative treatment + sphenopalatine ganglion block (3 cases, of which 2 needed EBP) and 1 with conservative treatment + great occipital nerve block.

Conclusions Despite being a resident-teaching hospital, there is a relatively low incidence of PDPH, even after ADP – this could be due to preemptive conservative treatment instituted to avoid symptoms of PDPH. Even though PDPH is a rare complication of neuraxial technique, it is necessary to recognise its impairment in neonatal care and institute regular audits and adequate referencing and treatment protocols.

ePoster session 5 – Station 3

EP157 **SPREAD OF LOCAL ANESTHETICS AFTER ERECTOR SPINAE PLANE BLOCK – A MAGNETIC RESONANCE IMAGING STUDY IN HEALTHY VOLUNTEERS**

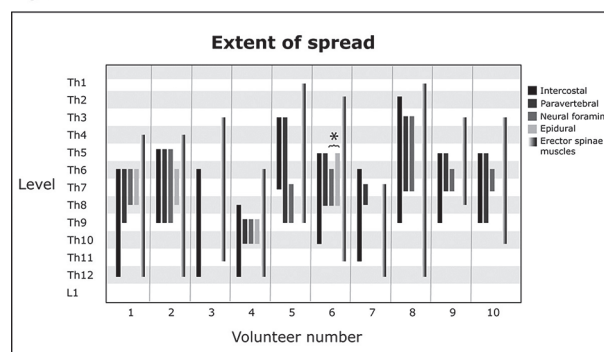
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Background and Aims Erector Spinae Plane Block (ESPB) is a truncal fascial block with a disputed mechanism and anatomical site of effect. This study aimed to perform a one-sided ESPB and utilize magnetic resonance imaging (MRI) to investigate the spread of the local anesthetic (LA) and the corresponding dermatomal loss of sensation to pinprick and cold.

Methods Ten volunteers received a right-sided ESPB at the level of Th7, consisting of 30 ml 2,5 mg/ml ropivacaine with 0,3 ml gadolinium. The loss of sensation to cold and pinprick was registered 30 minutes after the block was performed. One-hour post block an MRI was performed.

Figure 1



Abstract EP157 Figure 1 The extent of spread was evaluated using MRI after injection of 30 ml 2,5 mg/ml ropivacaine with 0,3 ml gadolinium to a total volume of 30,3 ml at the level of Th7. The extent of spread to the paravertebral space, the intercostal space, foramina, epidural space, and Erector spinae muscles are represented with bars for each of the ten volunteers. Contralateral epidural and foraminal spread are marked with an asterisk