Abstract B19 Figure 2

Total time taken to perform sciatic nerve block was comparable between the groups.

Conclusions Popliteal sciatic nerve block given at pre bifurcation has faster onset of action compared to post bifurcation and block performance time was comparable and independent of BMI in both the groups.

B20 TO COMPARE THE ANALGESIC EFFICACY OF ON ARRIVAL ULTRASOUND GUIDED PERICAPSULAR NERVE GROUP BLOCK (PENG) VS FEMORAL NERVE BLOCK FOR HIP FRACTURE

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Background and Aims The incidence of hip fracture is increased in elderly people in recent times and the pain associated with hip fracture is an important source for significant morbidity and mortality. Effective pain management immediately after hospitalization will reduce the in-hospital and long term complications following hip fractures. UGRA has become widely popular over the last decade and conventional femoral nerve block proved effective analgesia with fewer side effects. To improve the quality of analgesia PENG block was developed recently for blocking femoral, obturator and accessory obturator nerve branches supplying the hip joint. Hence we conducted the study to compare the analgesic efficacy of femoral nerve block and PENG block in hip fracture patients admitted to the hospital during preanaesthetic evaluation.

Methods we choose a sample size of 50 and randomly allocated in to 2 groups including ASA I, I, III and age group between 50 - 90 years. 20 ml of 0.25% Bupivacaine was used in both groups under ultrasound guidance. Primary objective was to assess VAS score at rest. Secondary objectives were to assess hemodynamic changes and VAS score on passive leg raise at 1 hour after block is being given.

Results Better hemodynamics were achieved in both the groups. When compared VAS score in PENG group was better than femoral nerve group in the initial 15 to 30 minutes but at 1 hour both groups had comparable VAS scores.

Abstract B20 Figure 1

Abstract B20 Figure 2

Conclusions Both Blocks provide hemodynamic stability by reducing the tachycardia and hypertension induced by pain and provide excellent analgesia in hip fracture patients.

B21 DEVELOPING AN ULTRASOUND-GUIDED FASCIA-ILIACA PLANE BLOCK TRAINING MODEL

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Background and Aims Simulation based education (SBE) promotes practice, feedback, and self-reflection in the absence of risk to patients.1 When teaching regional anaesthesia, SBE has been shown to be effective, improving knowledge and skills.2,3 High cost, high-fidelity training models are available, but often with limited life-spans. Evidence suggests that low cost alternatives may be appropriate for certain skills.4 The project aim was to develop an effective, low-cost, sustainable, model designed for practicing an ultrasound-guided fascia-iliaca plane block.

Methods The model was intended to be fully recyclable and easily remade following use. It was designed to represent anatomy under ultra-sound, allowing needle and local anaesthetic spread visualisation, and provide the tactile feedback of passing through fascial planes. 10 anaesthetic novices and emergency medicine trainees attended two teaching sessions using the models. They were asked to evaluate its effectiveness immediately following the session.
Abstract B21 Figure 1

Results Trainees rated the model as 9.2/10 in allowing needle visualisation, and 9/10 in allowing local anaesthetic spread visualisation. 8 of 10 trainees were able to feel the sensation of passing through fascial layers. All trainees either agreed or strongly agreed that use of the model had improved their confidence in performing an ultrasound-guided fascia-iliaca plane block. Globally, trainees rated the model as 9.5/10 with regards to being a useful training aide.

Abstract B21 Figure 2

Conclusions The model developed is an effective training tool with respect to performing an ultrasound-guided fascia-iliaca block. The model can be made at low cost using commercially available materials and be fully recycled following use. Ethics approval was not required for this study.

Abstract B22 Figure 1 showing the scoring card for the scanning assessments

Results Nineteen residents completed the study, of which 13 (68%) reached 90% proficiency with a median number of 7 scanning sessions (IQR 6 – 9) (Figure 2). Learning curves for individual element identification showed C5,6,7 ventral rami, upper and middle trunk were easily learnt when compared to the C8, T1 ventral rami and inferior trunk (Figure 3). Overall, the number of scanning sessions required to attain cognitive skills were lesser 4 (2 – 6) when compared to the psychomotor skills 6 (IQR 4–8 ; P=0.002).

Abstract B22 Figure 2

Background and Aims Identification of individual brachial plexus elements enables anaesthesiologists to perform site specific regional anaesthesia with low local anaesthetic volume and minimal complications. This study explored the learning curves of anaesthesiology residents for identification of individual brachial plexus elements above the clavicle using a systematic sign-based scanning technique (SSBST).

Methods After institutional ethics approval (PG DISSENTATION/02/2019/70) and registration in CTRI (CTRI/2019/05/019380), 22 residents were enrolled. All received teaching material and hands on training sessions related to SSBST. Resident scanning sessions were organised on pre-approved volunteers. The performance of the candidates were assessed by two consultants, using a SSBST proficiency scoring card (Figure 1). Residents periodically repeated sessions till they attained a proficiency score >90% on 3 consecutive scanning or maximum of 20 scans whichever was earlier.

References

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Learning Curve for Identification of Individual Brachial Plexus Elements Above the Clavicle using a Systematic Sign-Based Scanning Technique

A94
