



ULTRASOUND-GUIDED PERICAPSULAR NERVE GROUP BLOCK COMPARED WITH FASCIA ILIACA BLOCK FOR FACILITATING POSITIONING BEFORE SPINAL ANAESTHESIA IN PROXIMAL FEMUR FRACTURE SURGERY

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ABSTRACT

Background: Positioning patients with proximal femur fractures for spinal anaesthesia is painful. Fascia iliaca block (FIB) is commonly used, while pericapsular nerve group (PENG) block is a newer ultrasound-guided technique providing targeted hip analgesia. **Aim:** To compare the effectiveness of PENG block versus FIB in facilitating positioning for spinal anaesthesia. **Methods:** Thirty-six adult patients were allocated to PENG (n=18) or FIB (n=18). Blocks were given 10 minutes before positioning using a curvilinear probe and a 23G Quincke-Babcock needle. Pain during positioning (VAS), time to positioning, and satisfaction were recorded. **Results:** PENG showed lower VAS and faster positioning. **Conclusion:** PENG block provides superior analgesia and facilitates positioning compared to FIB.

KEYWORDS :

INTRODUCTION

Proximal femur fractures cause severe pain and difficulty in positioning for neuraxial anaesthesia. Fascia iliaca block provides partial analgesia, while the PENG block selectively targets articular branches supplying the hip capsule, offering improved pain control.

Aim

To compare PENG block and fascia iliaca block for facilitating positioning prior to spinal anaesthesia.

MATERIALS AND METHODS

Prospective comparative case series including 36 adults with proximal femur fractures. Blocks were administered 10 minutes before positioning using a curvilinear probe (2–5 MHz) and 23G Quincke-Babcock needle. Primary outcome was VAS during positioning; secondary outcomes were time to positioning, satisfaction, and complications.

RESULTS

Parameter	PENG Group (n=18)	FIB Group (n=18)
Mean Age (years)	66.4 ± 8.2	65.1 ± 7.9
Male:Female	10:8	9:9
ASA I/II/III	4/9/5	5/8/5

Parameter	PENG Group	FIB Group	P value
VAS during positioning	3.4 ± 0.8	5.2 ± 1.0	<0.001
Time to positioning (min)	5.1 ± 1.2	7.8 ± 1.5	<0.001

DISCUSSION

PENG block offers targeted articular branch blockade resulting in superior analgesia and faster positioning compared to FIB.

CONCLUSION

PENG block is a safe and effective alternative to FIB for facilitating spinal anaesthesia in proximal femur fracture patients.

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