

54 A Novel, Cost-Effective and Easily Reproducible Simulation Method for Teaching Fascia Iliaca Blocks Significantly Improves Peri-Operative Administration Rates in Neck of Femur Fracture Patients

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Despite high-level evidence supporting early fascia iliaca block (FIB) administration in patients sustaining neck of femur (NOF) fractures, administration remains suboptimal, restricted primarily by limited training opportunities. We present a novel, cost-effective and easily reproducible simulation session designed to teach the landmark technique during the Covid-19 pandemic.

A simulation mannequin was used with four absorbent swabs, two banana skins and a clear dressing were applied to the inguinal region to recreate the “two-pop” texture of the landmark technique. Ten participants attended, limited by social distancing. A 1 (poor) to 5 (excellent) feedback sheet was handed to all participants for the five domains of content, delivery, interaction, usefulness, and quality of the practical skills session, with opportunities for qualitative feedback. The FIB administration rates in all NOF fracture patients between August -October 2019, before the simulation session, were statistically compared to November-December 2020, following it.

All participants gave a 5/5 (excellent) rating for all five domains, confirming good acceptability amongst practitioners. In the time period before the session, 9/29 NOF fracture patients received a FIB, improving to 18/31 patients following it ($p=0.042$; two-tailed Fisher's exact test), a statistically significant increase in administration. The average cost per participant for the single-use materials in the session was £1.56, whereas the multiple-use items costed £7.88 per participant.

Adoption of this novel, cost-effective and widely reproducible simulation method is deemed highly useful and acceptable by a diverse range of healthcare professionals, resulting in a statistically significant increase in FIB administration in NOF fracture patients.