

Comparative Study of Analgesic Efficacy of Ultrasound Guided Femoral Nerve Block Versus Intravenous Fentanyl Injection in Fracture Femur Patients at Emergency Department

Authors : Asmaa Hamdy, Israa Nassar, Tarek Aly

Abstract : Introduction: Femoral fractures are the most common presentation in the Emergency Department (ED), and they can present as isolated injuries or as part of a polytrauma situation. To provide optimum pain management care to these patients, practitioners must be well prepared and current with utilizing modern evidence-based knowledge and practices. Management of pain associated with fracture femur in the emergency department has a critical role in the satisfaction of patients and preventing further complications. This study aimed to evaluate the analgesic efficacy of ultrasound-guided femoral nerve block compared with intravenous fentanyl in fractures of the femur in patients presented to the Emergency Department. Patients and Methods: Fifty patients with femur fractures were divided into two groups: Group A: In this group (twenty-five patients) were given intravenous fentanyl 2 micro-grams/kg and re-assessed for pain by Visual Analogue Score (VAS). Group B: In this group (twenty-five patients) underwent ultrasonography-guided femoral nerve block and were re-assessed for pain by VAS. Results: VAS score on the movement of the fractured limb between group A and group B at a 10-minute post-intervention period shows $P= 0.043$, and hence the difference is significant. VAS score on the movement of the fractured limb between group A and group B during a 10-minute post-intervention period showed a significant difference. Seventeen patients in group A had major PID with a percentage of 63% VS 10 patients in group B with a percentage of 37%. conclusion: both femoral nerve block and intravenous fentanyl are effective in relieving pain in patients with femur fractures. But femoral nerve block provides better and more intense analgesia and major pain intensity difference in less time. Moreover, the use of FNB had fewer side effects and more Hemodynamics stability compared to opioids.

Keywords : femur fracture, nerve block, fentanyl, ultrasound guided

Conference Title : ICOT 2022 : International Conference on Orthopaedics and Trauma

Conference Location : San Francisco, United States

Conference Dates : November 03-04, 2022