

Academic research department

Public health and community medicine

Department



Sample size estimation

Name: Ibrahim Ahmed Ibrahim Walash

Title of the study: Analgesic Efficacy of Combined Lumbar Erector Spinae Plane Block and Pericapsular Nerve Group Block in Patients Undergoing Hip Surgeries

Degree: MD Degree in Anesthesiology, Intensive care & Pain Management

Study design: prospective study

Sample size estimation

Based on review of past literature (Pascarella. et al.2021), who found that the estimated mean postoperative pain :maximum NRS after 12-24 h in PENG group is 3.25 ± 1.75 while in control group is 5.5 ± 1.5 .The least a sample size calculated using Statistics and Sample size pro program version 6 is 24 subjects with drop out of 25%. The power of study is 80% and confidence level is 95%.

Sample size:24 subjects

Referenc:

Pascarella, G., Costa, F., Del Buono, R., Pulitanò, R., Strumia, A., Piliego, C., ... & La Verde, F. (2021). Impact of the pericapsular nerve group (PENG) block on postoperative analgesia and functional recovery following total hip arthroplasty: a randomised, observer-masked, controlled trial. *Anaesthesia*, 76(11), 1492-1498.

Fatma Nassal