

Comparative Study Comparing Continuous Spinal Anesthesia and Continuous Epidural Anesthesia as Regard Safety and Efficacy

Thesis submitted for partial fulfillment of the MD degree in Anesthesia

BY

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SUMMARY

Continuous spinal anesthesia is the technique of producing and maintaining spinal anesthesia with small doses of LAs injected intermittently into the subarachnoid space via a catheter. The level of the blockade is established gradually, a method that greatly reduces the possibility of high spinal anesthesia and decreases the likelihood of cardiovascular instability. The continuous spinal technique assures safe and adequate spinal anesthesia and analgesia.

Catheters used can be a micro-catheter (24G) or a macro-catheter (>24G), the micro-catheter allow using smaller spinal needles thus decreasing the incidence of PDPH, but it present more technical difficulties. It can be inserted in a catheter-over-the needle or a needleover-the catheter fashion according to the CSA set used, catheter-over-the needle type (Spinocath®) can decrease duration and severity of PDPH by decreasing CSF leak from around the catheter.

The study was conducted at Fayoum University Hospital, Faculty of Medicine Fayoum University, on sixty patients scheduled for elective surgeries were enrolled in the study. 30 patients received CSA and the other 30 patients received CEA for this study.

The demographic data, pain intensity, sensory block level, motor block, ability to flex the knee; vital signs: occurrence of post-dural puncture headache 'PDPH' and total dose of local anesthetics given in both groups were recorded.

We found that the CSA technique is ideal for high-risk patients in an unstable hemodynamic condition because of the possibility of injecting the local anesthetic into the subarachnoid space in incremental doses, thereby