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TRANSIENT NEUROLOGIC SYMPTOMS FOLLOWING SPINAL LIGNOCAINE AND BUPIVACAINE FOR CAESAREAN DELIVERY AT MULAGO HOSPITAL: A RANDOMISED TRIAL.``THE Li-Bu Trial''

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ABSTRACT:

Introduction: Transient neurological symptoms (TNS) are defined as symmetrical bilateral pain/ dysthesia in the back or buttocks or pain radiating to the lower extremities 24 hours after recovery from spinal anesthesia . In Mulago Hospital (National Referral and teaching hospital), Spinal Lignocaine and Spinal Bupivacaine are the drugs of choice for facilitating caesarean delivery by neuraxial blockade. However , both have been implicated in the causation of Transient Neurological Symptoms from studies conducted in Europe and America with spinal lignocaine being the worse drug**.**
Objective: To determine the incidence of TNS following use of spinal Lignocaine and spinal Bupivacaine and any other factors that may contribute to the development of TNS during neuraxial blockade in parturients for caesarean section at Mulago NRH.

Design:The study was blind random controlled trial, to determine the incidence of TNS in mothers receiving either spinal Lignocaine or Bupivacaine for caesarean section at Mulago teaching hospital.. This study were ducted on the 5^{th} floor in the Obstetric and Gynaenacology theatres. Potential cases for the study was recruited from either emergency or elective caesarean patients.

Methodology: Following ethical approval, we conducted as a randomized double blinded controlled trial..Consented patients were randomized to two arms;Lignocaine and Bupivacaine arms respectively. Mothers were followed from 24-72 hours post spinal for and responded to researcher administered questions to assess presence of TNS .The Trial was registered with the Pan African Clinical Trials:PACTR201306000510382.

Results: 200 cases met the inclusion criteria, then doubly blinded and randomized to two arms. There was TNS with either arm; 11 (5.5%) cases in the Bupivacaine arm with incidence rate of 0.11, and 8 cases (4%),with incidence of 0.08, had TNS in the Lignocaine arm. The incidence rate ratio (IRR) is 1.375(95%CI), p-value 0.531. Statistically there was no difference in the incidence of TNS in either arm.

Conclusions: No statistical difference noted between spinal Bupivacaine and Lignocaine in the causation of TNS in Mulago NRH among the parturients for C-section.

Key Words: Transient Neurologic symptoms, Neural axial block, spinal Lignocaine and Bupivacaine, Ceasarean Section.