COMPARISON OF DESARDA VERSUS MODIFIED BASSINI INGUINAL HERNIA REPAIR IN MULAGO HOSPITAL: A RANDOMIZED CONTROLLED TRIAL.

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A DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE ACADEMIC DEGREE OF MASTER OF MEDICINE IN SURGERY OF MAKERERE UNIVERSITY

JUNE 2008

ABSTRACT

***Background*:** Although the Tension free inguinal hernia repair with a mesh is the standard technique in many developed countries, its use has remained low in the developing world. This has been attributed to initial cost of the mesh. The most commonly used inguinal hernia repair in Mulago hospital is the modified Bassini. Studies done elsewhere have shown that this method is associated with more immediate postoperative pain as compared to the tension free repairs. The short-term outcomes of inguinal hernia repairs can be used as predictors of the medium and long-term outcomes. Desarda has proposed a new repair technique that does not involve the use of a mesh and yet theoretically offers reduced tension, an effective repair, is easy to learn and is relatively cheap because it can be done with relatively affordable and available materials. The aim of this study was to compare the two methods as regards the patients' resumption of normal gait and the short-term postoperative pain patterns.

***Objective*:** To compare the short-term outcome of Desarda versus modified Bassini inguinal Hernia repair in Mulago hospital.

***Design*:** A single blinded randomized controlled trial.

***Setting*:** Mulago National Referral hospital in Kampala, Uganda.

***Methods*:** 108 patients each with a unilateral, primary, reducible inguinal hernia were recruited through SOPD. Consent to participate in the study was obtained and then they were randomly allocated to either the Desarda's or modified Bassini inguinal hernia repair. Consent was sought before each operation. Short-term postoperative pain was assessed using a VAS 1 to 2 hours after the operation, on the 3rd post operative day (POD) and again on the 7th POD. The gait was assessed on the 7th POD and again on the 14th POD in those patients who had not attained their

normal gait or had any postoperative wound complications on the 7th POD. Time taken for each operation and the postoperative complications on the 7th POD were also noted.

***Results*:** Of the 108 patients recruited, 88 (81.5%) were male and 20(18.5%) female. Three patients were lost to follow up and one had an emergency laparotomy. The baseline characteristics were similar between the two arms. The mean POD for resumption of normal gait was 3.62 for both methods. There was no statistically significant difference between the two operation groups as regards to postoperative complications present on the 7th POD, (P-value = 0.530). There was no statistically significant difference between the two methods as regards the postoperative pain patterns measured using a VAS 2 hours postoperative, on 3rd POD and on the 7th POD; (P-values of 0.269, 0.541 and 0.534 respectively). There was no statistically significant difference between the days of resumption of normal gait between the two methods, (p-value = 0.938).

Conclusion: There is no difference in short-term outcome between Desarda and modified Bassini inguinal hernia repair as regards to resumption of normal gait and postoperative pain patterns.