DEBATE “YOUNG” TRIALIST SURGEONS VS “OLD” EXPERIENCED SURGEONS - IS REALITY MORE REAL THAN SCIENCE?

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COMPARISON OF LIGHTWEIGHT VERSUS HEAVYWEIGHT MESH IN LICHTENSTEIN REPAIR OF HERNIA

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Introduction: Lichtenstein inguinal hernia repair is associated with a low incidence of recurrence; however, the use of heavyweight mesh has been linked with chronic pain and foreign body sensation. It is hypothesized that use of lightweight mesh may reduce these problems. The aim of this study was to compare the outcome after using lightweight or heavyweight mesh for the repair of inguinal hernia with reference to postoperative pain, short term recurrences, seroma formation and foreign body sensation.

Materials and methods: The study was conducted in Department of Surgery, Maulana Azad Medical College and associated Lok Nayak Hospital, New Delhi from October 2012 to March 2014. 50 patients were included in this study and Patients were randomized by using computer generated numbers to group A using Lightweight mesh

(Ultrapro™, pore size > 1mm, weight~33mg/m²) and group B using Heavyweight polypropylene mesh (Trulene™, pore size < 1mm weight~100mg/m²) mesh. The planned sequence of follow-up after discharge of the patient was at 1 week, 1 month, 3 month and 6 month.

Results: This study recorded a significant reduction in post-operative pain of any severity following Lichtenstein repair of an inguinal hernia with a lightweight mesh. The p-value at 24 hour, 1 week, 1 month were 0.017, 0.007, 0.037 respectively. Thirteen patients (26%) in this study complained about foreign body sensation, twelve (24% of total patients) of them were from heavyweight mesh group and one (2% of total patients) was from lightweight mesh group. P-value was < 0.001 which was statistically significant. The recurrence rate with a follow up period of six months was zero. We recorded eight cases of seroma formation, five in heavyweight mesh group and three in lightweight mesh group. The p-value was 0.440 which was statistically not significant.

Conclusions: The use of lightweight mesh in Lichtenstein hernia repair is a valid alternative to the Heavyweight mesh with reduced post-operative pain, foreign body sensation and seroma formation. The risk of hernia recurrence warrants longer follow-up period.