O19 5-YEAR OUTCOMES OF A RANDOMIZED CLINICAL TRIAL OF MESH FIXATION WITH CYANOACRYLATE OR SUTURES FOR LICHTENSTEIN HERNIA REPAIR: RECURRENCE, CHRONIC PAIN AND QUALITY OF LIFE

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Aim: To assess the 5-year outcomes of mesh fixation with cyanoacrylate or sutures for Lichtenstein hernioplasty (recurrence rate, chronic pain, and patient’s quality of life (QoL)).

Methods: 370 patients who underwent Lichtenstein hernia repair were randomized to receive either cyanoacrylate or non-absorbable sutures for lightweight polypropylene mesh fixation. Postoperative outcomes were evaluated by an independent blinded observer. QoL was assessed using the EuraHS-QoL questionnaire (European Registry for Abdominal Wall Hernias).

Results: Initially 188 patients received Glue and 182 Suture. Mean follow-up: 72.6±7.8 months. 78.1% patients (Glue:147, Suture:142) completed 5-years follow-up. No significant differences were observed in terms of chronic pain. VAS score: ≥3: 8.1% vs 9.1%, Glue vs. Suture, respectively (p = 0.836). 8 patients (2.7%) (4 in each group) reported pain at rest, reaching 10.7% when analyzing pain during activity.

QoL was unaffected (EHS-QoL score=0) in the majority of patients: 131 (89.2%) vs. 127 (89.5%) for Glue or Suture respectively (p = 0.930). QoL score greater than 20/90 points: 2 patients (Glue) vs. 6 (Suture) (p = 0.099). The Suture group QoL-score was higher in all domains but without statistical significance. Foreign body sensation was slightly higher in Suture group (7.5% vs. 9.3%) but without reaching statistical significance (p = 0.534). There were no differences in the recurrence rate (2.6% vs. 3.8% for Glue and Suture respectively) (p = 0.533).

Conclusions: Chronic discomfort rate after Lichtenstein hernioplasty is not negligible. Atraumatic mesh fixation with glue was quicker and resulted in less acute postoperative pain than sutures for Lichtenstein hernia repair, but with no statistical differences in terms of chronic pain nor the long-term patients’ QoL.