

Evaluating the Efficacy of Double Flap versus Quadruple Flap Techniques in Stabilizing Ball Implants Post-Evisceration: A Comparative Analysis

Background: The optimal surgical technique for stabilizing ball implants following evisceration remains debated, Commonly used techniques are the double flap (two scleral flaps) and quadruple flap (four scleral flaps) however comparative clear data remains lacking.

Aim: To evaluate and compare the efficacy of double flap and quadruple flap techniques in stabilizing post-evisceration ball implants.

Methods: A prospective, randomized, controlled trial was conducted on sixty patients undergoing evisceration and implant placement. Patients were randomly assigned to either the double flap technique group (n=30) or the quadruple flap technique group (n=30). The primary outcome measure was implant stability assessed clinically and through imaging at 1, 3, and 6 months postoperatively. Secondary outcomes included postoperative pain, infection rates, and patient satisfaction.

Results: The quadruple flap technique demonstrated a lower complication rates, including a significantly lower rate of implant extrusion (6.7% vs. 26.7%; p=0.01). Moreover, Patient satisfaction and quality of life scores were significantly higher in the quadruple flap group. However, primary outcome measures between the groups did not show a statistically significant difference.

Conclusion: The quadruple flap technique offers lower complication rates, higher patient satisfaction, and improved functional outcomes compared to the double flap technique.