

# **Cut and paste: sutureless conjunctival closure in strabismus surgery.**

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## **Abstract:**

**PURPOSE:** This study investigated the use of fibrin glue and compared its effect with traditional sutures for conjunctival closure in strabismus surgery.

**METHODS:** The study included 12 patients undergoing horizontal strabismus surgery, of whom 5 underwent bilateral medial rectus muscle recessions and 7 underwent bilateral lateral rectus muscle recessions. For each patient, fibrin glue was used to close the conjunctiva of one eye and 6-0 plain sutures were used to close the other.

**RESULTS:** All eyes maintained adequate closure of the conjunctiva postoperatively and there were no intraoperative or postoperative complications for an eye. However, the average surgical time needed to apply fibrin glue was considerable less than that required for closure with sutures. Furthermore, eyes closed with fibrin glue were associated with significantly less postoperative inflammation and patient discomfort than those closed with sutures. All patients and parents reported significantly less discomfort from the eyes treated with fibrin glue.

**CONCLUSION:** These results are promising and demonstrated a safe and effective alternative to traditional suture closure in strabismus surgery. When compared to traditional suture closure, conjunctival closure with glue includes the following advantages: less postoperative patient discomfort, diminished postoperative inflammation, and potentially reduced surgical time with corresponding reduced time under general anesthesia.