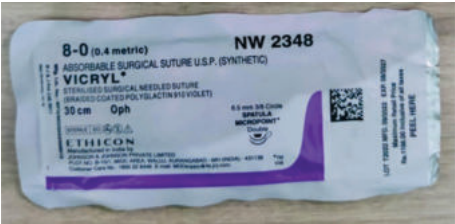


	<div>ORIGINAL RESEARCH PAPER</div> <div>STITCH VS. STICK: A COMPARATIVE ANALYSIS OF GLUE AND SUTURE FOR PTERYGIUM EXCISION SURGERY.</div>	<div>Medical Science</div> <div>KEY WORDS:</div>
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<div>ABSTRACT</div>	<div> Aim: To compare the use of Fibrin glue versus Vicryl Suture for fixating Conjunctival auto graft for Pterygium excision surgery. Method: We included 60 Patients by obtaining informed Consent and Surgery of their choice, diagnosed with Pterygium at Ophthalmology department at C U Shah Medical Hospital Surendranagar.30 of them treated with Fibrin glue (Group -A) and 30 of them treated with Suture (Group-B). All patients were followed up for six months after completion of treatment. Key parameters assessment included recurrence rates, surgery time postoperative outcomes. Result: Out of 60 patients, recurrence rate was observed in 4% in fibrin glue group and 9 % in suture group. Postoperative pain, Inflammation was less with fibrin glue than suture, operative time was about 12-15 min for fibrin glue group and about 15-20 min for suture group done by same Surgeon and statistically significant improvement in visual outcome with fibrin glue group then suture group. Conclusion: Our conclusion is Fibrin glue has better less recurrence rates, less surgery time and better Postoperative outcomes than Suture technique in pterygium surgery. </div>	
<div>INTRODUCTION</div> <ul style="list-style-type: none"> Pterygium is degenerative condition of subconjunctival tissue which proliferate as vascularised granulation tissue to invade the cornea, destroying the superficial layers of stroma and bowman's membrane , the whole being covered by conjunctival epithelium. Indications for pterygium excision include :ocular discomfort, conjunctival inflammation, decreased vision secondary to induced astigmatism ,progression of the pterygium toward the visual axis, restricted ocular motility, and Cosmesis. Among the different surgical procedures, the use of glue (fibrin glue) and sutures (surgical stitches) for pterygium excision have emerged as the two main approaches that are now the front-runners, this comparative study aims to clarify the benefits and drawbacks of these two techniques. In this comparison of the two procedures, we will look at a number of factors, such as surgical time, recurrence rate & postoperative outcome. 	<ul style="list-style-type: none"> Study included 60 patients who underwent any one of the following technique: Conjunctival autograft using fibrin glue (Group-A) Conjunctival autograft using sutures:Vicryl8_0 (Group-B) <div>   </div> <div>Prepreoperative Image Post-operative Day-1</div> <div>  </div> <div>Absorbable Suture:Vicryl 8-0</div> <div>  </div> <div>Fibrin glue</div>	
<div>Methodology</div> <ul style="list-style-type: none"> The study was done as a prospective, single-center, observational study at the C U Shah Medical College and Hospital, Surendranagar. History was taken in detail and patients having primary pterygium fulfilling the inclusion and exclusion criteria were included in the study. Data was collected after taking informed consent. All the following investigation were done before and after pterygium excision surgery like visual acuity, anterior segment examination using slit lamp, measure the size of pterygium (in milli meter) from the limbus & keratometry. In un dilated eyes grading of the pterygium was done as follows: <ul style="list-style-type: none"> Grade I - <2mm on to the cornea Grade II - 2-4mm on to the cornea Grade III - >4mm on to the cornea 		

- Each patient's surgical time was noted at the end of the surgery.
- Following the surgery, all the patients from both groups were monitored for a period of six months at a regular interval of Post-operative Day 1, Day 7, 1 Month, 3 Months & 6 months. In the course of these follow-up visits, data was gathered & following factors were evaluated.
- 1. Rate of recurrence was evaluated by clinical examination at the end of follow up period.
- 2. Post-operative surgical outcomes were assessed and recorded including pain, inflammation, complications & patient satisfaction.

RESULTS

- 60 patients with primary pterygium who underwent pterygium excision with conjunctival autograft were studied:
- Demographic characteristics of the patients are as follows:



FactoryWorker

- Recurrence was lower in the group using fibrin glue (4%) than in the group using sutures (9%). Patients who received fibrin glue after surgery felt less discomfort than those who received sutures.
- When carried out by the same surgeon, the application of fibrin glue resulted in lower surgical times (12–15 minutes) compared to sutures (25–30 minutes).

	Patient	Recurrence rate	Surgical time (Min)
Fibrin glue Group	30	4% (1/30)	12-15 min
Suture Group	30	9%(3/30)	25-30 min

- Postoperative pain and inflammation were less severe in the fibrin glue group than in the suture group.
- A speedier recovery, shorter hospital stay, and more overall patient comfort were also observed in the fibrin glue group of patients.

CONCLUSION

- From my study of comparison of the two methods of pterygium excision using fibrin glue and suture, the use of fibrin glue during pterygium surgery provides a number of advantages over using sutures as Fibrin glue has less recurrence rates, less surgery time and better post-operative outcomes than suture technique

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