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Snatching: A Modified Cosmetic Technique in Pterygium Surgery without using Scalpel

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Disclosure

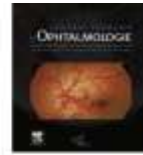
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ORIGINAL ARTICLE

Snatching: A modified cosmetic technique in pterygium surgery without using scalpel

L'avulsion : une technique cosmétique modifiée pour la chirurgie du ptérygion sans bistouri

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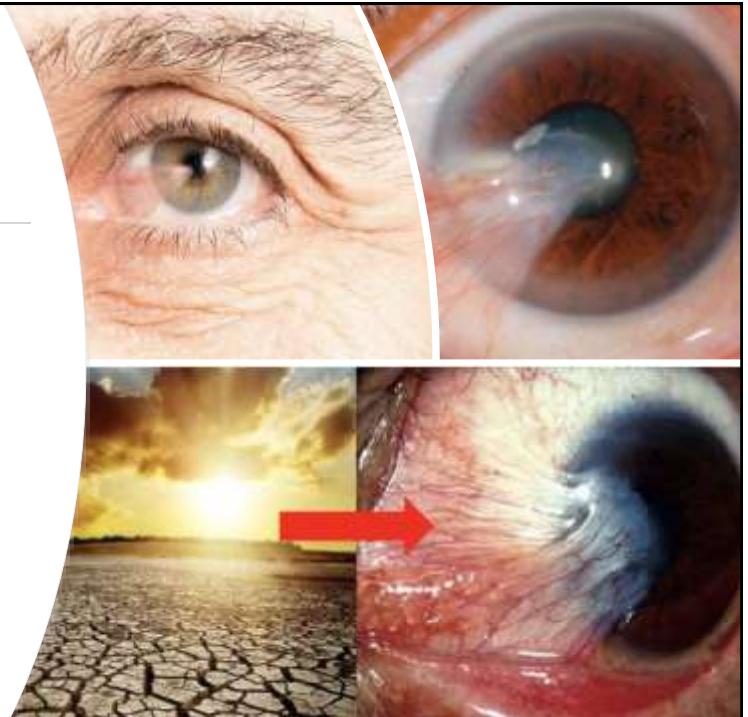
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Introduction

- Definition
- Clinical Features
- Risk Factors
- Symptoms
- Indications for surgery



Introduction

- Surgical removal is the single successful treatment with cosmesis attributed as the indication for pterygium surgery in 41.7% of the cases.
- Depending on the technique used, the risk of recurrence, however, has been documented to be as high as 89%.
- Currently, there are not a single surgical intervention that is recurrence free.
- Consequently, there is a need to acquire new treatment modalities.



Purpose

- Evaluate the cosmetic surgical outcomes of primary corneal pterygia excision using the avulsion (snatching) technique.
- Analyse the effectiveness, safety, and applicability of our avulsion technique towards better excellent cosmetic appearance.



Methods

- Twenty-five eyes of 25 patients with primary pterygium.
- F/U for at least 6 months.
- In all patients, snatching (modified avulsion) technique was utilised to avulse the pterygium head off the corneal surface and remove any residual fibres by Colibri without need for keratectomy with a scalpel.
- Postoperative cosmetic outcomes and discomfort level illustrated in Table 1 and 2 by the patients using a subjective scoring system.
- The scoring systems utilised via the ocular surgeon illustrated in Table 3 and 4 to evaluate the surgical outcomes.



Postoperative Subjective Scoring System

Table 1 Postoperative Subjective Grading of the Appearance on Day One.[3]

Score	Examination Findings of the Postoperative Cornea
Grade 1	Cannot tell which eye had surgery
Grade 2	Can tell which eye had surgery but looks untouched
Grade 3	Operated eye looks red but acceptable
Grade 4	Operated eye looks beefy red and unacceptable

Table 2 Postoperative Subjective Grading of Discomfort Day One.[3]

Score	Examination Findings of the Postoperative Cornea
Grade 1	No Discomfort
Grade 2	Some Discomfort
Grade 3	Uncomfortable



Postoperative Surgeon Scoring System

Table 3 Grading of the Postoperative Site on the Basis of External and Slit Lamp Examination.(3)

Score	Examination Findings (Postoperative Site)
Grade 1 (pearly white)	Better than normal appearance of operative site
Grade 2	Normal appearance of the eye and sclera area
Grade 3	Presence of fine episcleral vessels in the excised area
Grade 4	Episcleral vessels reaching the limbus
Grade 5	Fibrovascular tissue in the excised area reaching the limbus
Grade 6	Fibrovascular tissue invading the cornea
Grade 7	Worse than pre-operative appearance
Grade 8	Grade 7 + Symblepharon and restrictive eye movements

Table 4 Postoperative Grading of the Cornea on the Basis of Slit Lamp Examination.(3)

Score	Score Examination Findings of the Postoperative Cornea
Grade 1	Clear
Grade 2	Mild Keratin
Grade 3	Clouding at Surgical Site
Grade 4	Lamellar FH



Pterygium Excision

- The surgery was performed under peribulbar anaesthesia. Intralesional 2% lidocaine with epinephrine was further utilised for anaesthesia as well as to help in delineating the degree of pterygium.
- Snatching technique using a Gulani Pterygium cross-action spreader was utilised to dissect the pterygium head off the cornea in a solo radial movement.
- Dissection resumed till we approached the sclera to dissect the pterygium body from the conjunctiva above and the episcleral below. The whole pterygium was detached as one mass with its fan-like growth at the fornix.
- A Colibri forceps is then used to remove all the residual remnants off the cornea by pulling them a lamellar peeling fashion till the cornea surface is smoothened.
- A Weck cell sponge pieces saturated in 0.04% MMC were sited at the shortened tissue beneath the conjunctival edge for 2 minutes, whilst shielding the residual sclera from contact to MMC by a dry Weck-cell. Following the removal of MMC sponges, the normal saline was used to flush the area.



Snap-Video of the Operation (To be Inserted)

Hello,

I have sent few messages to the organization committee, but I have not received any replies. I am having a slight issue editing the operation surgery. I will ask for your understating to give me the chance the submit the correct PPT version later on. Meanwhile, I have no other option but to submit this PPT version.

Many thanks,

Noha Soliman



Post-operative Care

- Postoperative management included antibiotic drops, steroids, and lubricants drops five times daily for one week. The patients were planned for follow-up visits postoperatively at 1 week, 1 month, and 6 months.



Results

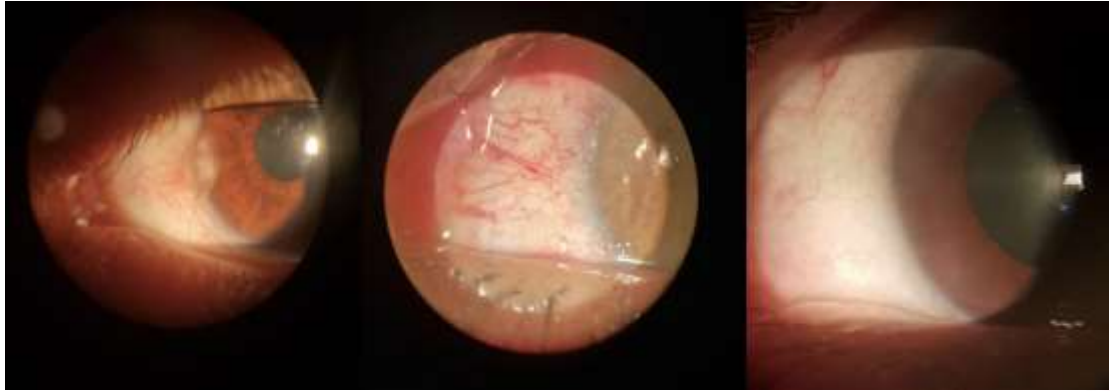
- There were no intra-operative complications encountered in any of the surgeries.
- Week 1 post-op (Subjective Scoring System):
 - 8 patients (32%) reported they can tell which is the operated eye but looked untouched (Grade 2, Table 1)
 - While 17 patients (68%) reported that the operated eye looked red but is accepted (Grade 3, Table 1)
 - 20 patients (80%) reported some discomfort (Grade 2, Table 2)
 - The remaining 5 patients (20%) reported no discomfort (Grade 1, Table 2)
- Week 1 post-op (Surgeons Scoring System):
 - Normal operative area (Grade 1, Table 3) for whole patients (100%)
 - Corneal examination: clear cornea (Grade 1, Table 4) in 18 eyes (72%), 6 eyes (24%) had mild keratitis (Grade 2, Table 4), and 1 eye (4%) had clouding at the surgical site (Grade 3, Table 4)



Results

- Six months post-op (Subjective Scoring System):
 - All the patients (100%) reported they cannot state which eye had the operation (Grade 1, Table 1)
 - None (0%) of them reported discomfort (Grade 1, Table 2).
- Six months post-op (Surgeons Scoring System):
 - Normal operative area (Grade 1, Table 3) for entire patients (100%).
 - Examination reported a clear cornea (Grade 1, Table 4) in 24 eyes (96%) and 1 eye (4%) had mild keratitis (Grade 2, Table 4) on 6 months postoperatively.
- At 6 months follow up period, all the patients remained fully satisfied with the aesthetic appearance of the cornea and the overall look of the operated eye with only one case showed early signs of recurrence (4%).





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Conclusion

- Snatching (modified avulsion) technique was found to be effective, safe, and presents decent aesthetic appearance for the management of primary corneal pterygia when safety points are firmly followed.

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Thank You

