SURGICAL PTERYGIUM REMOVAL WITH FREE CONJUNCTIVAL GRAFT

E. Hatzizisis, <u>V. Kapourani</u>, A. Sarafi, E. Amperiadis, F. Loizou, K. Misiou, F. Mousiou, S. Tsironi

Department of Ophthalmology, General Hospital G.Papanikolaou, Exochi, Thessaloniki, Greece





THERE IS NO CONFLICT OF INTEREST

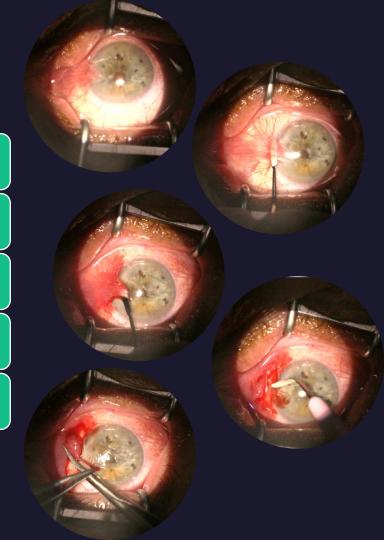
ABSTRACT

- **PURPOSE:** Pterygium is a common ocular surface disorder. Its removal poses a challenge due to its tendency to recur and cause complications. The purpose is to highlight a surgical removal technique using a free autologous graft to cover the sclera.
- **METHODS:** The pterygium flap was prepared and widely excised from its base. Remnants were cleaned with a hockey knife. Then, an autologous conjunctival graft was harvested from the superior conjunctiva and placed to cover the sclera at the flap resection site, orienting the epithelium towards the limbus. The graft was stabilized with sutures to both the conjunctiva and sclera.
- **RESULTS:** The procedure was performed without complications. The patient demonstrated good postoperative recovery. At the 6-month follow-up, there was no evidence of recurrence or discomfort.
- **CONCLUSIONS:** Wide resection of the pterygium flap using a free conjunctival graft is a method with very low recurrence and complication rates. However, the longer surgical duration and technically demanding skill should be considered.

METHODS

EXCISION

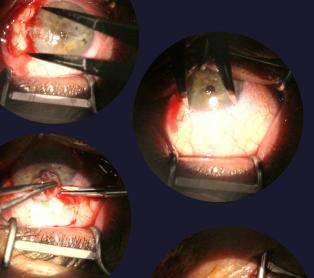
- Sterile drape, lid speculum insertion
- Blunt dissection of head, body lifted off sclera
- Conjunctiva/Tenon's down to limbus incised with scissors
- Pterygium removed ensuring all fibrovascular tissue on cornea taken with a hockey knife



METHODS

GRAFT

- Superior bulbar conjunctiva marked out
- Partial thickness conjunctival graft harvested leaving epithelium intact
- Graft rotated and placed over defect, keeping limbus orientation
- Secured at both the limbus and corneoscleral junction with 4 sutures 8-0 Vicryl
- Topical antibiotics, steroids given postoperatively





RESULTS

- Smooth postoperative recovery course
- No evidence of pterygium recurrence or ocular discomfort at 6 month follow up

CONCLUSIONS

- Conjunctival autografting has low recurrence rates and complications
- Procedure is time consuming and technically demanding requiring surgical skill
- A successful technique to manage pterygium excision and prevent recurrence

REFERENCES

- 1. Kenyon KR, Wagoner MD, Hettinger ME. Conjunctival autograft transplantation for advanced and recurrent pterygium. Ophthalmology. 1985 Dec;92(12):1461-70.
- 2. Allan BD, Short P, Crawford GJ, Barrett GD, Constable IJ. Pterygium excision with conjunctival autografting: an effective and safe technique. Br J Ophthalmol. 1993 Nov;77(11):698-701.
- 3. Tananuvat N, Martin T. The results of amniotic membrane transplantation for primary pterygium compared with conjunctival autograft. Cornea. 2004 May;23(4):458-63.
- 4. Hirst LW. Prospective study of primary pterygium surgery using pterygium extended removal followed by extended conjunctival transplantation. Ophthalmology. 2008 Oct;115(10):1663-72.
- 5. Gumus K, Erkilic K, Topaktas D. Twenty four month results of pterygium surgery with superior conjunctival autografts. Int Ophthalmol. 2020 Feb;40(2):451-458.
- 6. Roh YW, Lee SR, Chi MJ, Han SB, Byeon HK, Lew H, Choi KR. Comparison of Recurrence Rate between All-Suture Amnion Transplantation and Sutureless Amnion Transplantation for Primary Pterygia. Sci Rep. 2020 Feb 27;10(1):3722