

# Pterygium recurrence

- Progression of fibrovascular tissue beyond the limbal border onto the cornea. Non cancerous
- Definite risk factors : Dry eye disease, black race, and young age.
- Some surgical techniques are considered possible risk factors for recurrence. Using fibrin glue instead of sutures can further reduce recurrence rates
- Most recurrences happen in the first 3-6 months after surgery, 97% first year
- Techniques
  - Bare Scleral techniche. 11.4 -60%
  - Excision + Amniotic Membrane Transplantation (AMT). 4,7% – 26,9%
  - Excision + Conjunctival Autograft (CAU). 0 - 16,7%. GOLD-STANDARD
- The more a recurrence happens, the more difficult the treatment is.

## Treatment options

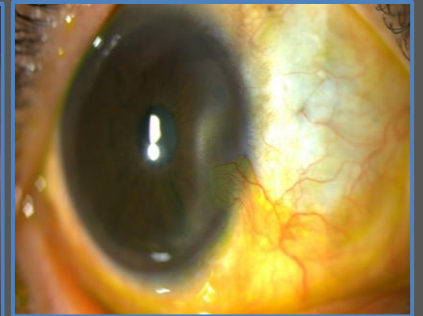
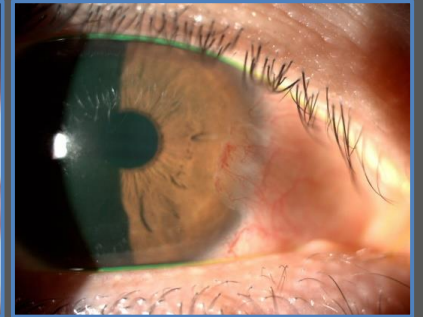
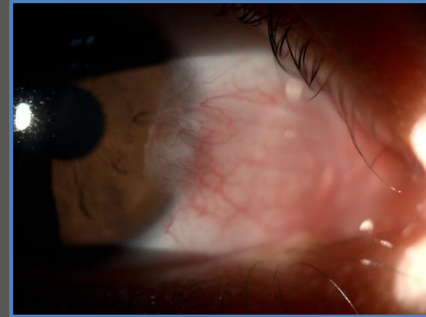
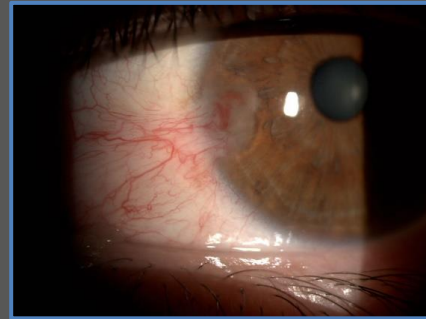
- **Surgery.**
- **Corticosteroids (CE).** Topically / subconjunctival injections
- **Nonsteroidal antiinflammatory drug (NSAID)** treatment
- **Cyclosporine**
- **Anti-vascular endothelial growth factor (anti-VEGF).** Bevacizumab. Temporary
- **Antimetabolites:** MMC. 5-FU

## Our 5-FU study

- Retrospective study.
- Intralesional 0.1 ml (5 mg) of 5-FU was injected every 1-2 weeks until pterygium atrophy was achieved. In non-responding cases, new excision with autologous conjunctival transplant was performed.
- Oral informed consent (off-label use of 5-FU).
- Complete ophthalmological evaluation

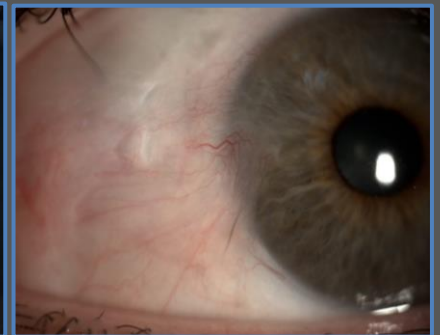
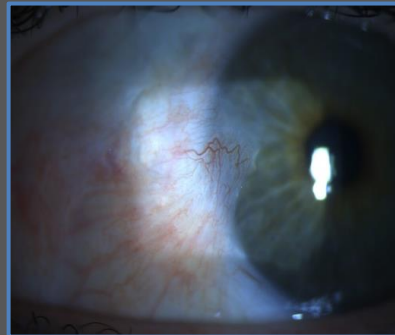
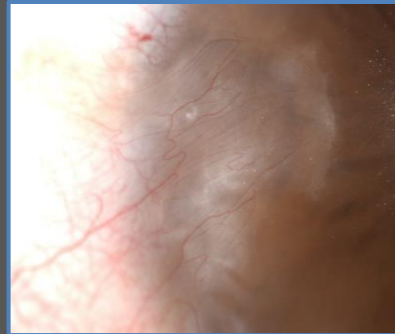
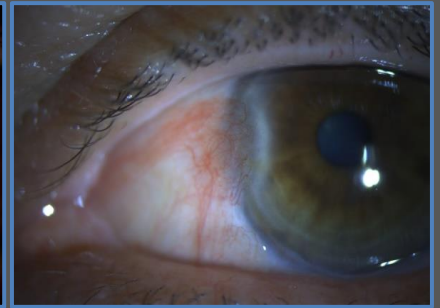
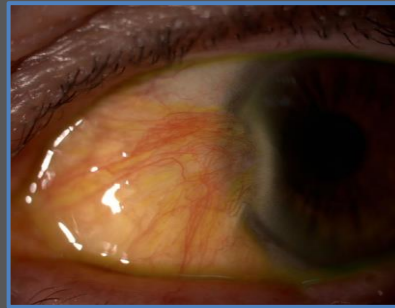
## Results:

- 14 eyes from 13 patients were included
- 12 eyes had previously undergone a primary excision with CAU, and two had a secondary excision with intraoperative MMC use.
- A mean of 5 injections were administered per eye (range: 2 - 6).
- Follow-up time ranged from 18 to 36 months.
- 12 eyes showed progression arrest (85.7%), 13 presented regression of the thickness and vascularity (92.8%), and all referred symptoms improvement.
- One patient suffered a corneal ulcer, that solved with intense lubrication.
- One patient underwent new excision, with no new recurrence after it. No other adverse events were identified.



## Conclusions:

- Multiple weekly subconjunctival 5-FU: safe and effective (future studies long term safety)
- No further growth was detected over 36 months
- The optimal number and dose of 5-FU injections is yet to be determined
- Cosmesis and patient satisfaction
- Inexpensive, available and easy to administer
- Cost benefit implications



# Bibliography:

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