OUTCOME OF AUTOLOGOUS BLOOD CONJUNCTIVAL GRAFT FOR PTERYGIUM SURGERY AT MBARARA UNIVERSITY AND REFERRAL HOSPITAL EYE CENTRE AND RUHARO EYE CENTRE

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INTRODUCTION

Pterygium is an initially painless but later discomforting and potentially blinding in advanced stages.

INTRODUCTION

- All methods of graft securing are comparable in terms of outcomes. (Natung *et al.*, 2017).

PROBLEM STATEMENT

- Conjuctival grafting onto the bare sclera reduces recurrence rate from 24-89% to 2-9%. (Kumar and Singh, 2018; Huda and Khaleque, 2019).

PROBLEM STATEMENT

- Suturing is technically difficult with a long learning curve.

PROBLEM STATEMENT

- One Vicryl suture costs around 34 US$ and used on a single person (Ben-Simon, 2017).

JUSTIFICATION FOR THE STUDY

- Autologous blood grafting is an easy procedure to learn, relatively cheap, safe, fast, universally available with no disease transmission risks.
- Autologous blood coagulum is associated with minimal post-operative discomfort.
- Its effectiveness in securing the graft has comparable outcomes to suturing and fibrin glue use.

AIM

- To determine the outcome of Autologous Blood Coagulum (ABC) grafts at MURHEC and REC.

SPECIFIC OBJECTIVES

1. To determine the average surgical time taken to complete Autologous Blood Coagulum (ABC) grafts at MURHEC and REC.

2. To determine the number of stable grafts on days 1 and 14 post-operatively at MURHEC and REC.

3. To determine the degree of post-operative discomfort after pterygium surgery on days 1 and 14 at MURHEC and REC.

METHODOLOGY

Study design:

This was a hospital-based case-series study conducted in two specialized ophthalmology centres. Mbarara university and referral hospital eye center (MURHEC) and REC

RESULTS

TABLE 3: TIME TAKEN IN MINUTES TO COMPLETE THE PROCEDURE

Time taken (minutes)	Frequency
<30	6
≥30	13
Total	19

Average duration from time of speculum insertion was 31 minutes

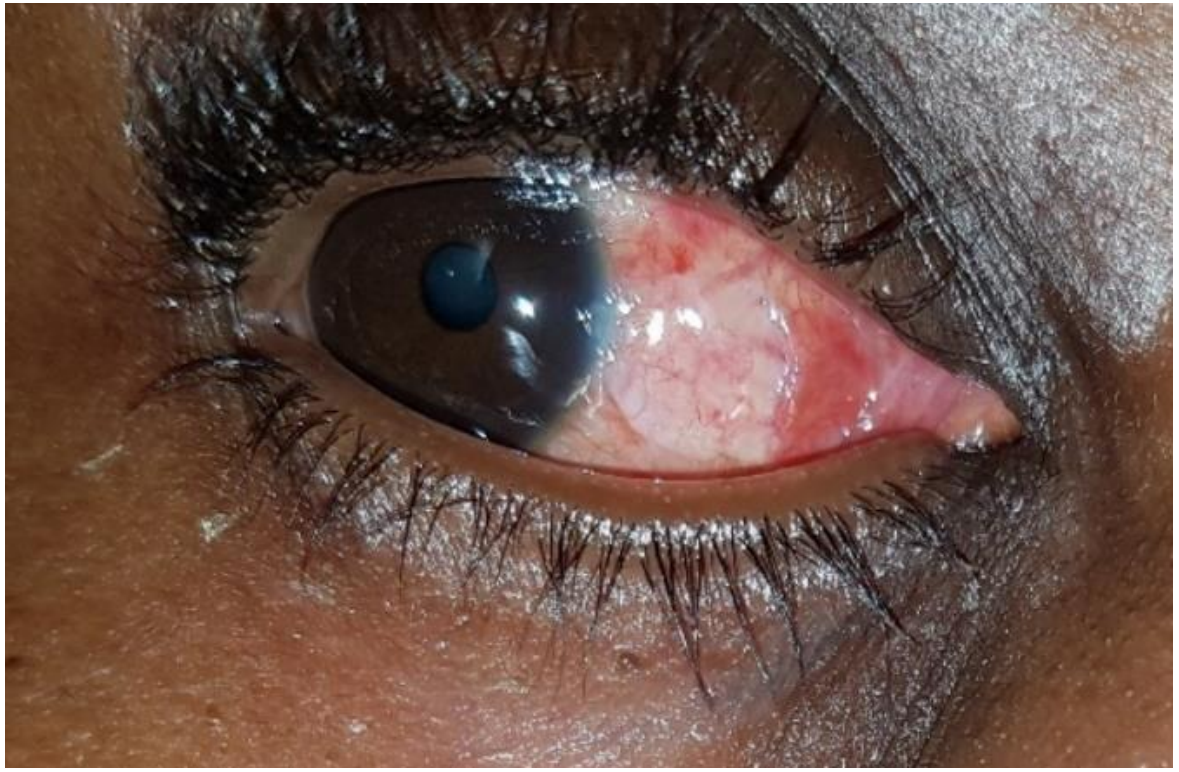
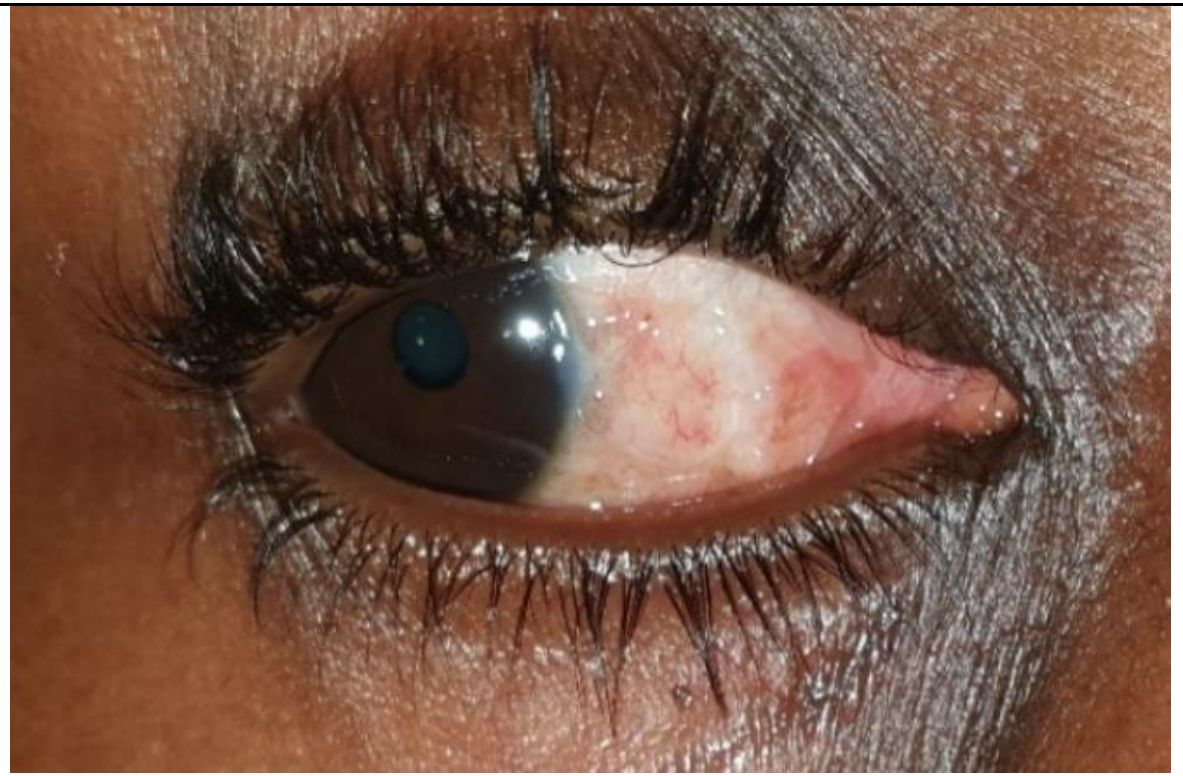
TABLE 4: STATUS OF THE GRAFT ON DAY 1 AND DAY 14 POST OPERATIVELY

Status of graft	Day 1	Day 14
Adherent all 4 corners	13(68.4%)	17(**94.4%**)
Displace one side	5 (**26.3%)**	1 (5.6%)
Displaced 2 sides	0(0.0%)	0 (0.0%)
Displaced 3 sides	1(5.3%)	0 (0.0%)
Graft lost	0 (**0.0%)**	0 (0.0%)
Total	19 (100%)	18 (100%)

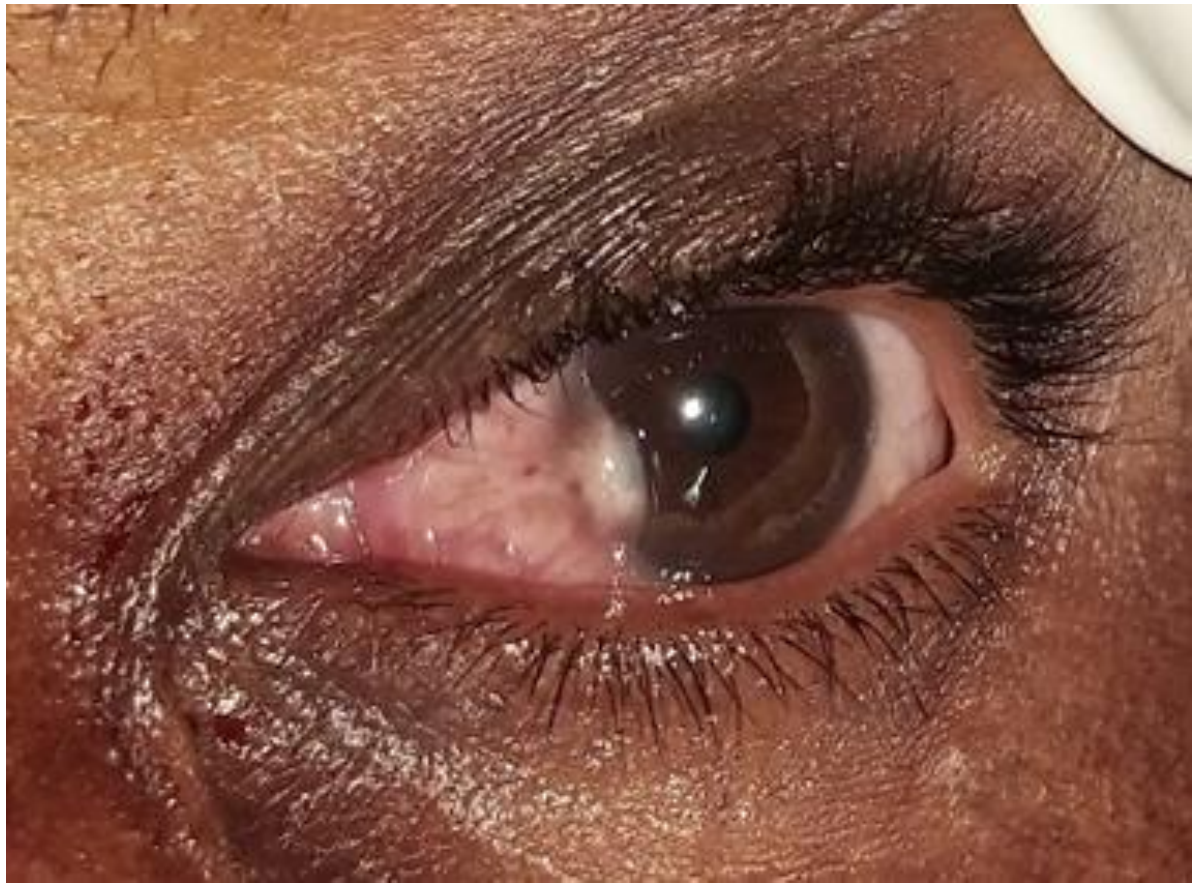
TABLE 6: LEVEL OF PAIN PERCEIVED BY PARTICIPANTS

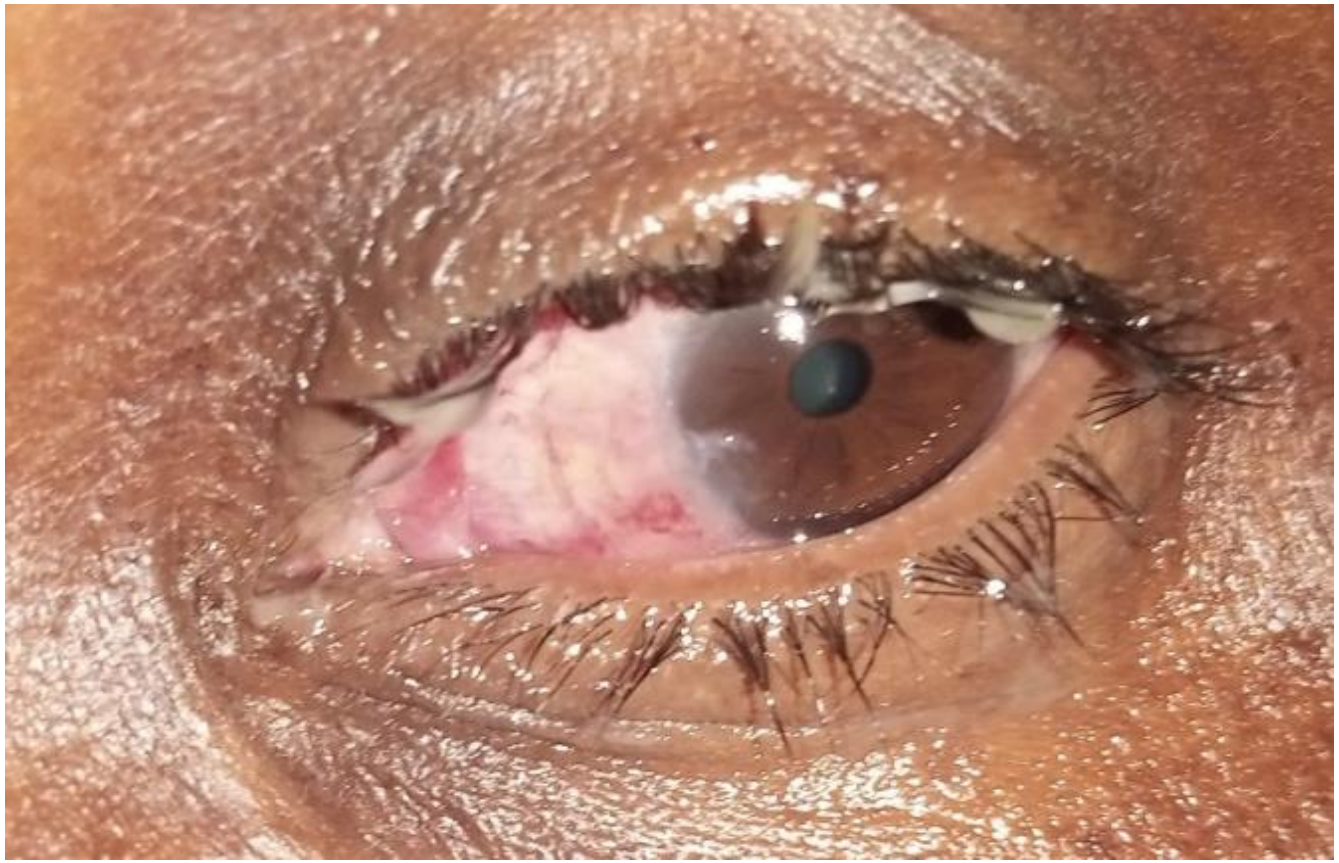
Pain scale	Day 1	Day 14
None = No pain at all	0 (0.0%)	14 (77.8%)
Very mild = presence of pain but easily tolerated;	12(63.2%)	3 (16.7%)
Mild = presence of pain causing some discomfort;	5 (26.3%)	0 (0.0%)
Moderate = presence of pain causing discomfort that interferes with usual activity or sleep	2(10.5%)	1 (5.6%)
Severe = presence of pain that completely interferes with usual activity or sleep.	0 (0.0%)	0 (0.0%)
Total	19 (100.0%)	18 (100.0%)

Case #1

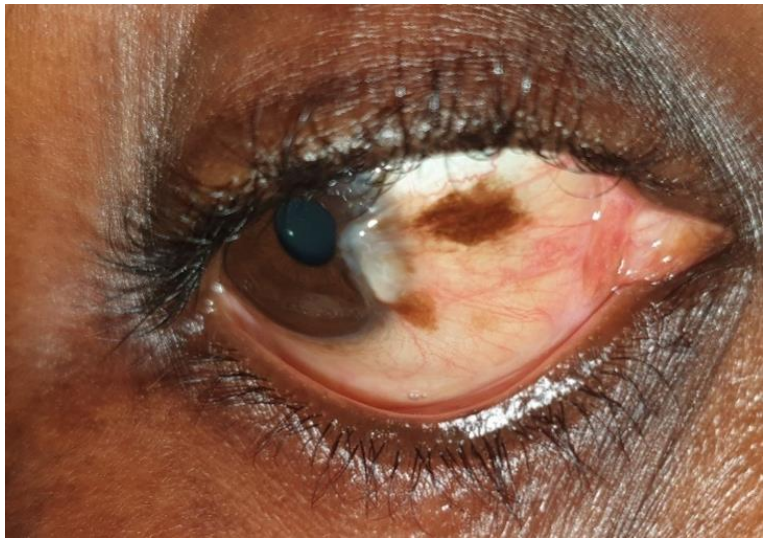
Day 1 post-operatively graft	Day 14 post-operatively graft
	

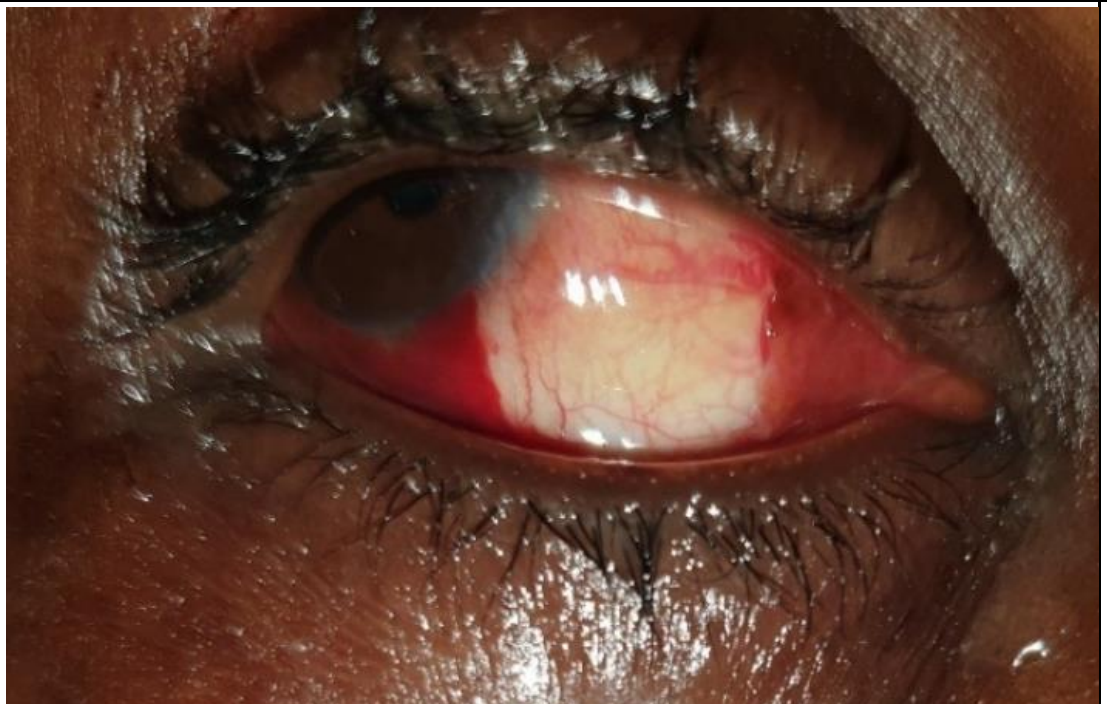
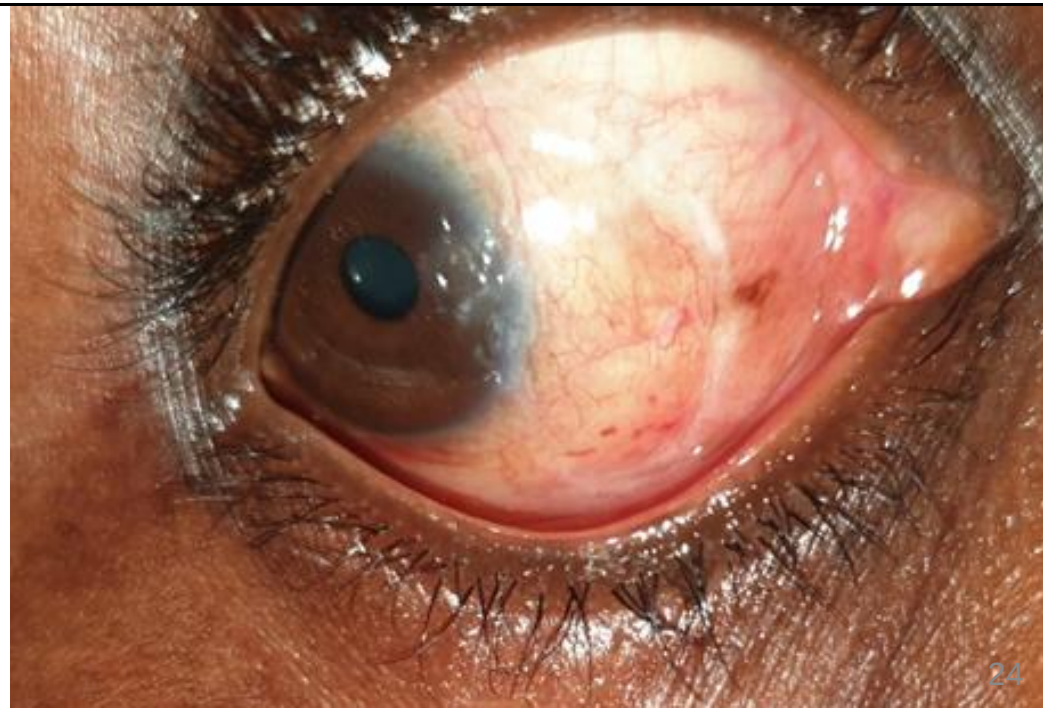
Case #2





Case #5



Day 1	Day 14
	

CONCLUSION

- This study demonstrated;
  - reduced surgical time,
  - stable grafts,
  - less post-operative discomfort

related to autologous in situ blood coagulum grafts.

RECOMMENDATION

- This technique should be used for conjunctival grafts which have a reduced surface area.

- Further studies comparing autologous graft and suturing should be carried out in our local setting.

- Care should be taken to harvest slightly larger grafts (1 mm) to cater for graft contraction.

ACKNOWLEDGEMENT

• Our research assistants and study participants .

Conflict of interest

- None.