



Is it Inevitable to have a scar?

Is the severe scar just around the corner?

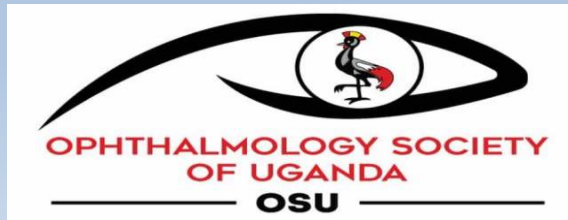
Should we wait, so Only time will tell?

Microbial keratitis with ciliary injection, corneal infiltrate and a hypopyon. This patient also has satellite lesions superiorly © Simon Arunga

PREDICTORS OF SEVERE CORNEAL SCARRING AFTER MICROBIAL KERATITIS IN SOUTHWESTERN UGANDA

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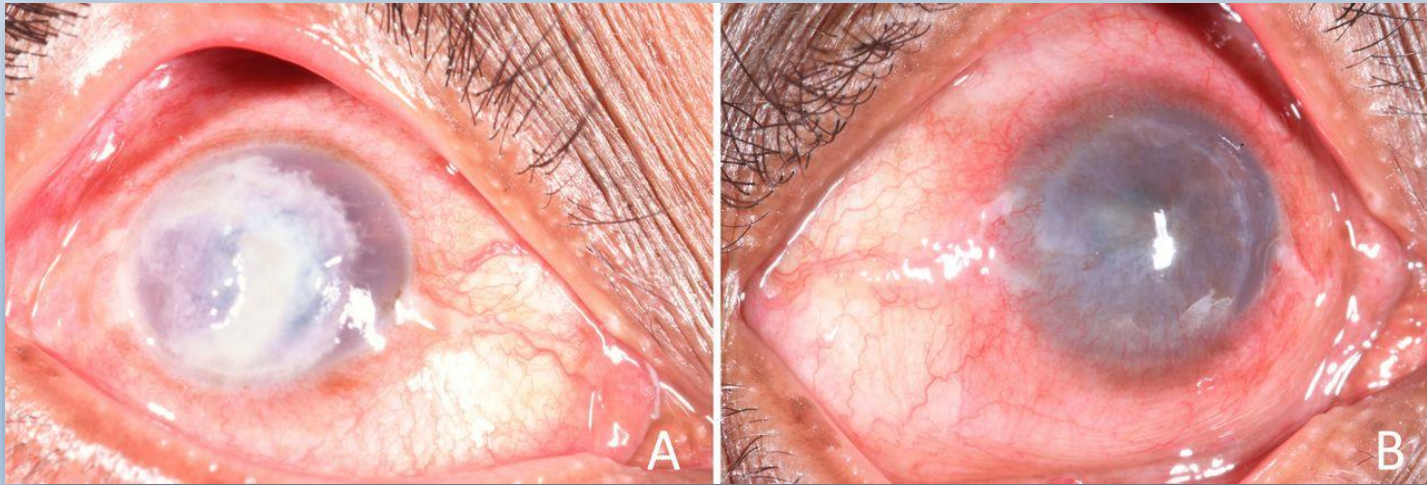


**MBARARA UNIVERSITY OF
SCIENCE & TECHNOLOGY**

SUCCEED WE MUST

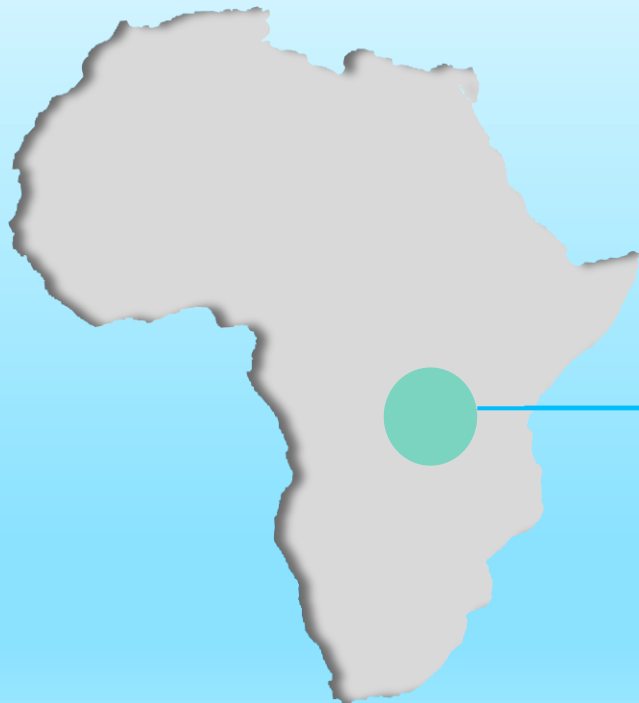
AIM

To determine the predictors of severe corneal scarring following microbial keratitis.



METHODS

Study Location

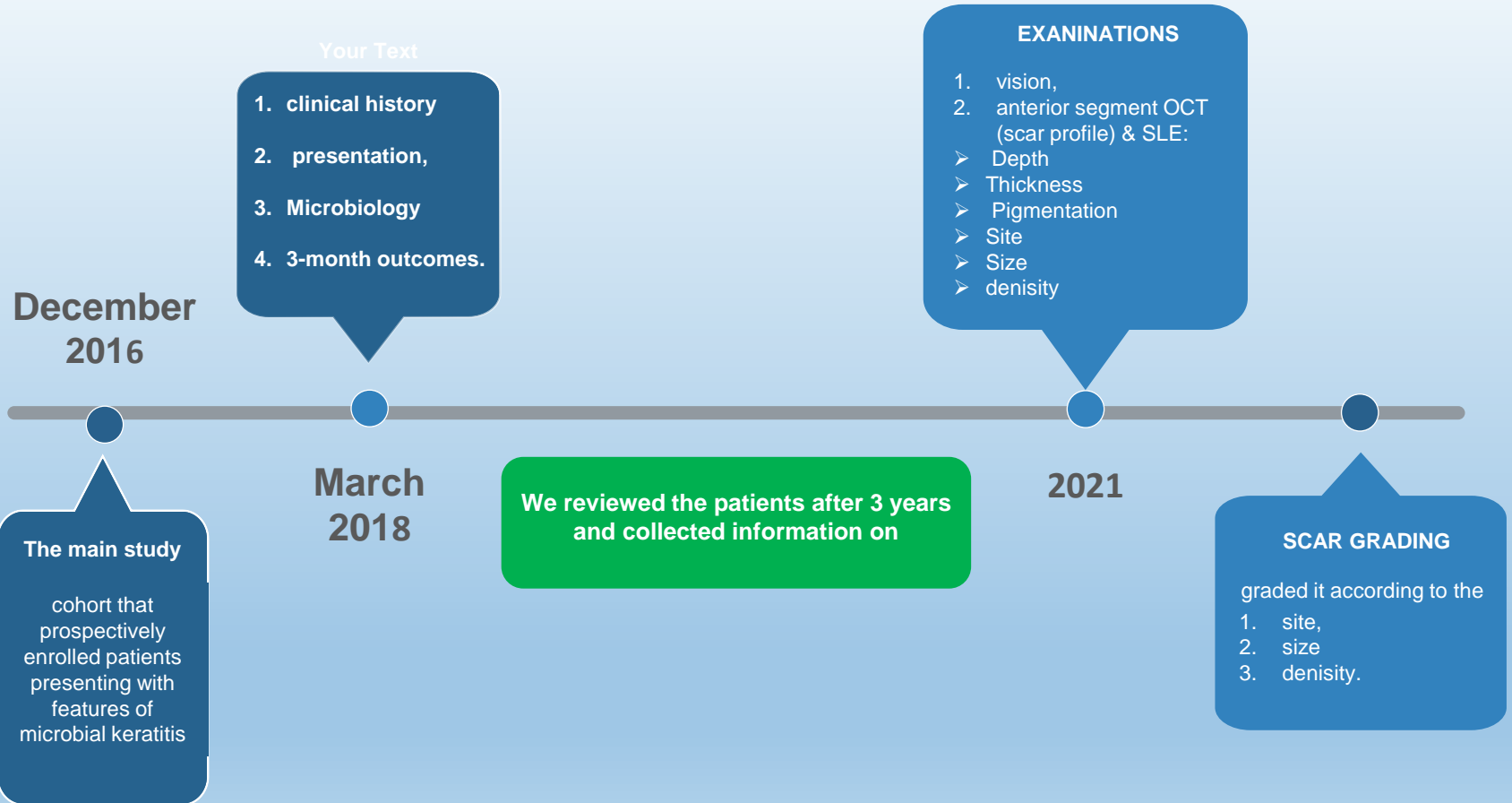


MURHEC



REC





METHODS

Scars were graded as **mild, moderate and severe** based on

Site

Size

Density

Corneal scar severity scoring

Site

scoring

3



Central

The scar or part of it obscuring the pupillary area

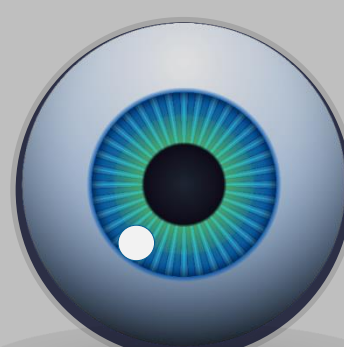
2



Para-central

between the pupil and periphery

1



peripheral

Limbal

Site



CENTRAL (3)



PARACENTRA (2)



PERIPHERAL (1)

Pupillary area

Size

scoring

3



2



1



**SCAR DIAMETER
MORE THAN
5 mm**

**SCAR DIAMETER
2:5mm**

**SCAR DIAMETER
LESS THAN
2mm**

Size



> 5 mm (3)



2:5 mm (2)



< 2 mm (1)

diameter

Density

scoring

3



Can not see the
iris

2



Can see the iris
but without
details

1



Can see the iris
details

Density



Can not see the iris (3)



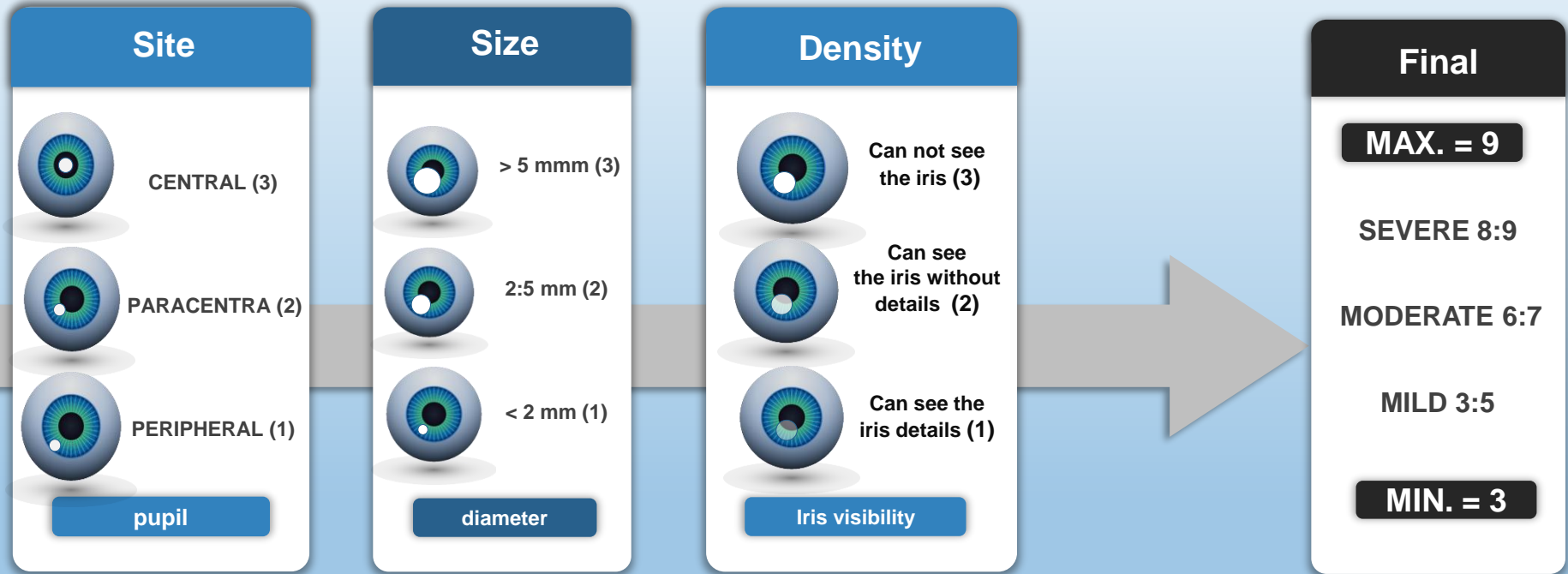
Can see the iris without
details (2)



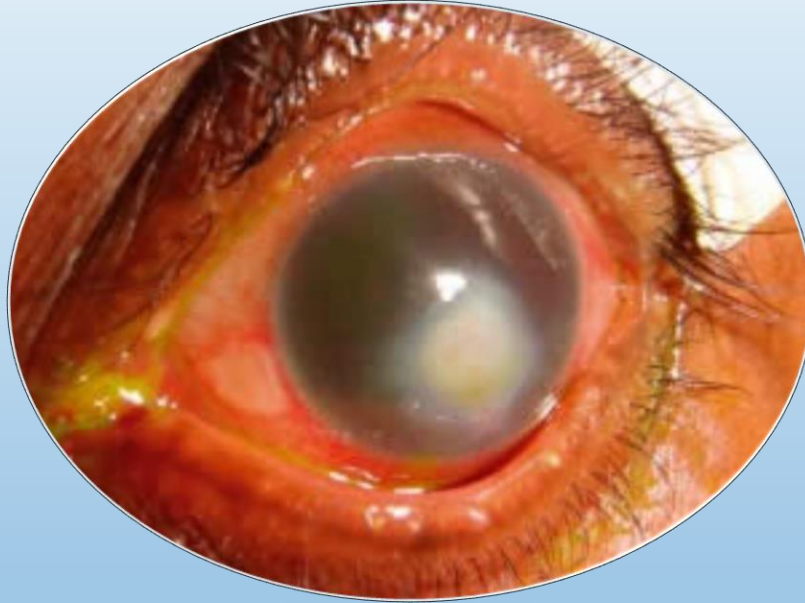
Can see the iris details (1)

Iris visibility

Corneal scar severity scoring

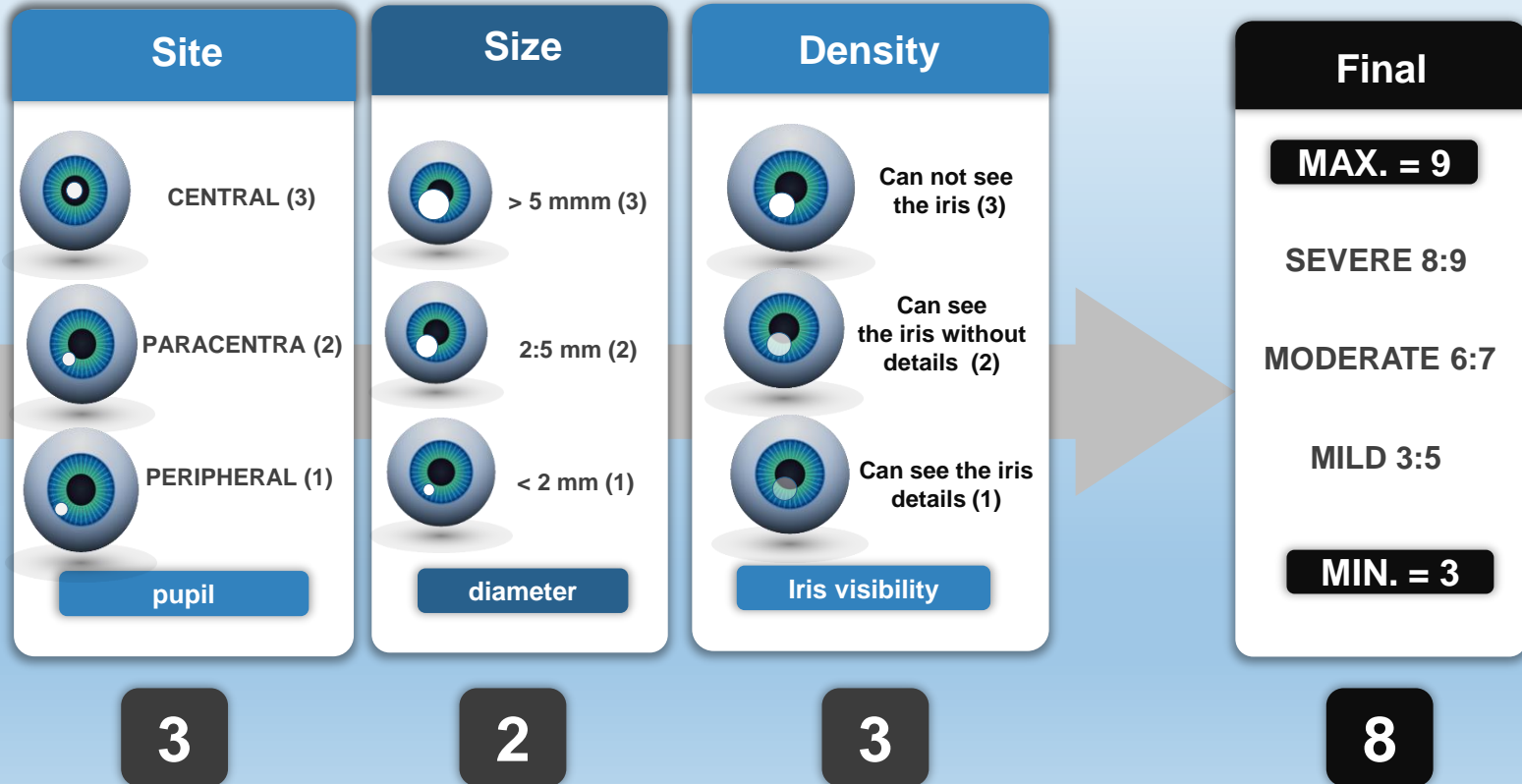
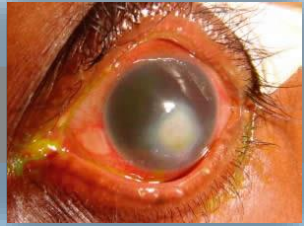


Example



Mr Massae's left eye, after several weeks of treatment. © Matthew Burton

Corneal scar severity scoring

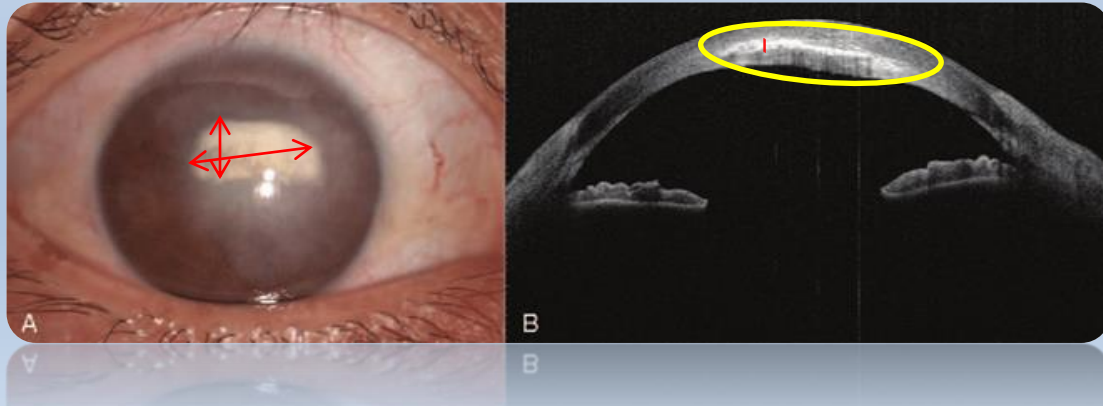


- **In a multivariable regression model, we tested the baseline features that were associated with severe corneal scarring.**

RESULTS

A total of **56** individuals were enrolled.

- **53** scars and **3** without scars
- Median scar thickness **183 μm** (IQR 125-296 μm).
- Scar size was variable (Median size was **7.6 mm** (IQR 2-12.5 mm)).



A table showing the grades of corneal scars, N=53

SCAR SEVERITY *	N	%
Mild	22	41.5
Moderate	9	17
Severe	22	41.5

*according to: "Corneal scar severity scoring"

Baseline factors which were strongly associated with severe corneal scarring were;

Factors	aOR	95% CI	P value
Stromal abscess/ Mass*			
An endothelial plaque	21.75	2.07- 228.77	0.010
Hypopyon	13.0	1.10- 152.4	0.042
Satellite lesions	5.3	0.97- 28.58	0.054

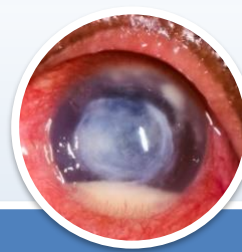


*Stromal abscess/ Mass: no ORs could be generated because of their 100% predictability

Conclusion



**Endothelial
plaque**



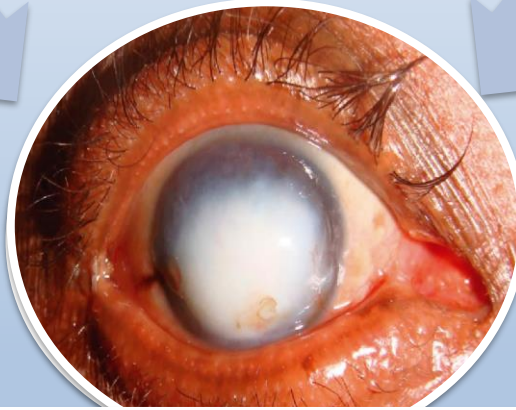
hypopyon



**Stromal abces
/mass**



**Satellite
lesion**



Severe corneal scar

Recommendation

This information should guide clinicians to:

- Provide proper prognostic counselling.
- More aggressive treatment approach to patients presenting with these features.

THANKS