

INTRODUCTION

S. pyogenes is a rare but virulent cause of keratitis associated with severe presentations and poor visual outcomes. To date this is the largest case series describing demographics, risk factors and outcomes.

METHODS

- Retrospective review
- Tertiary teaching hospital in United Kingdom
- Patient data collected between 2008 -2025

DISCUSSION

Most cases occurred in patients with underlying ocular co-morbidities or immunosuppression, suggesting a predilection for compromised corneas. Corneal perforation at presentation highlights the aggressive nature of infection and need for early intensive treatment and close monitoring. Despite limited sensitivity data, first-line Ofloxacin was associated with clinical improvement in several cases. No patients had systemic sepsis or systemic manifestations at presentation. However, even with treatment, prognosis can be unpredictable and vision-threatening.

RESULTS



12

CASES
of *S. pyogenes*
keratitis



11

PATIENTS



17

YEARS
2008 – 2025



50

YEARS
Mean age
(range 24–76)



58%

MALE
(7 of 12 cases)

PATIENT CHARACTERISTICS & RISK FACTORS

Ocular co-morbidities
included:

- Dry eye syndrome
- Herpes Simplex Keratitis
- Peripheral Ulcerative Keratitis
- Orbital inflammatory syndrome
- Exposure keratopathy
- Keratoconus
- Allergic eye disease



83%

(10 of 12 cases)
Pre-existing ocular
co-morbidities



27%

(3 of 11 patients)
Systemic
immunosuppression



8%

(1 of 12 cases)
Contact lens user



Duration of symptom onset: **1–4 days**



1 patient was asymptomatic and incidentally
detected on routine review

CLINICAL SEVERITY & INTERVENTIONS



25%

(3 of 12 cases)
Presented with
corneal perforation



33%

(4 of 12 cases)
Required surgical
intervention



1

case
Required
evisceration

MICROBIOLOGY



All 12 cases grew
S. pyogenes
from corneal
scraping on
admission



3 cases (25%)
also grew a second microbe

Surgical interventions included:
corneal gluing, temporary
tarsorrhaphy, upper lid botox
and evisceration



**KEY TAKE-HOME
MESSAGE**



S. pyogenes keratitis
is rare but can cause
severe disease



High risk of corneal
perforation and need
for surgical intervention



Early recognition and
aggressive management
are essential