

Paediatric Corneal Pathology: A Retrospective Audit of Presentation, Management, and Outcomes

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INTRODUCTION

- Paediatric corneal pathology can cause irreversible visual impairment if not recognised and managed promptly.^{[1][2]}
- Timely assessment, referral, and management are essential for this high-risk group.^{[1][2]}

AIM

- Review the spectrum of paediatric corneal disease at Royal Berkshire Foundation Trust.
- Assess management and visual outcomes against local and national standards.^[3]

METHODS

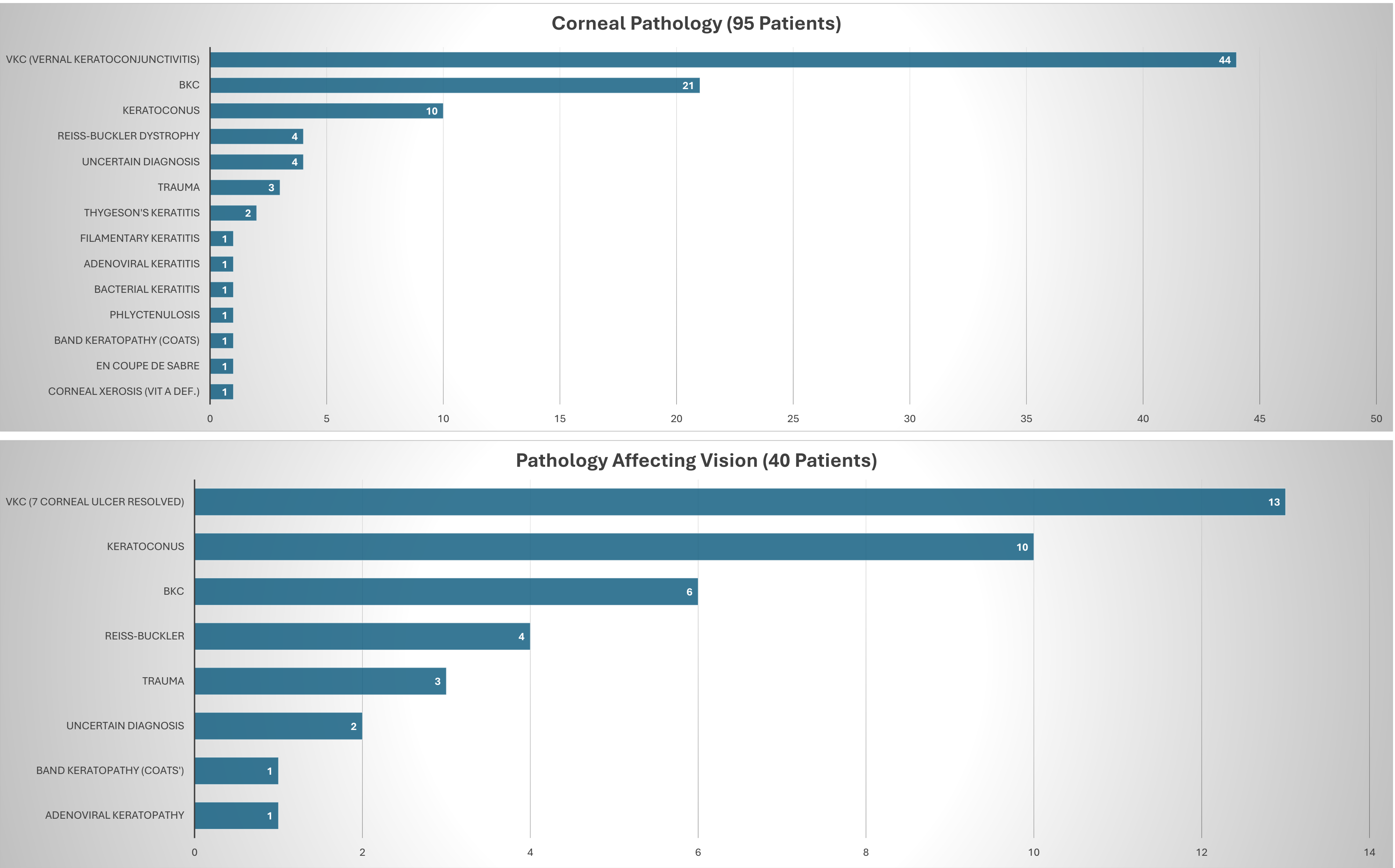
- Retrospective audit, ages 4–18, Jan 2024 – Oct 2025.
- Data from Medisight + electronic patient record.
- Variables: demographics, diagnosis, laterality, treatment, VA change, amblyopia risk.
- Pathologies: ulcers, opacities, keratoconus, VKC, BKC, dystrophies, trauma.
- Outcomes were assessed against standards for documentation, identification of visually significant disease, and amblyopia management.

AMBLYOPIA RISK

- 11 patients under 8 years.
- 3 showed amblyopic decline.
- All identified promptly; spectacles and/or occlusion.
- Good adherence to amblyopia-monitoring standards.

RESULTS

- 95 patients (43 F / 52 M); 72 paediatric ophthalmology, 18 cornea clinic, 5 joint tertiary.
- Top diagnoses: 44 VKC, 21 BKC, 10 keratoconus.
- 67 bilateral; 28 unilateral.
- Visual impairment in 40 - mostly VKC, BKC, keratoconus.
- Over 2 years: 64 stable, 19 improved, 12 deteriorated.
- Decline driven by band keratopathy, keratoconus, dystrophies, central VKC/BKC.
- Treatments: antihistamines, steroids, cyclosporine 0.1%, antibiotics, lubricants, BCL, debridement.^[4]



CHALLENGES

- Incomplete documentation of peripheral corneal findings.
- Diagnostic uncertainty in some cases.
- Unreliable VA from uncorrected refractive error or absent spectacles.
- Co-existing amblyopia or learning difficulties complicate interpretation.

CONCLUSION

- Wide spectrum of paediatric corneal pathology; most patients stable or improved.
- Documentation of peripheral findings often incomplete.
- Diagnostic uncertainty in some cases.
- VA assessment limited by uncorrected refractive error or absent spectacles.
- Improving these areas will raise quality of paediatric corneal care.

REFERENCES

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