# Indications and outcomes of vitreoretinal surgeries in Nepalese patients in a district hospital in the United Kingdom.

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### Purpose

To determine the indications of surgery for various vitreoretinal (VR) disorders and analyse their outcomes in the Nepalese population in our Trust's catchment area (Surrey/Hampshire).

Studying the eye health of the Nepalese community within our Trust is important, as the recent Census data indicates that the highest proportion of Nepalese residents within the UK is mainly concentrated in Hampshire.

### Materials & Methods:

A retrospective analysis was conducted on patients who underwent VR surgeries between December 2012 and January 2022 at Frimley Park Hospital.

Demographics (n=34)		
Mean Age, years	74.8	
Sex	n	%
Female	20	58.8
Male	14	41.11
Comorbidities:	n	%
Diabetes Mellitus	5	14.7
Hypertension	11	32.4
Diabetes and Hypertension	9	26.5
None	9	26.5
Average follow-up, months	25.1	

### Results

Macular Hole: (n=11)	
Average Minimum Linear Diameter, um	528.5
Average Basal Diameter, um	952.3
Stage:	%
Stage 3	63.6
Stage 4	36.4
Post Surgery Outcome:	%
Open	18.2
Closed	81.8
Visual acuity outcome: Change in mean LogMAR pre/post-surgery	0.021 (p>0.05)
Epiretinal membrane peel (ERM) (n=9)	
Stage: %	
Stage 1	40
Stage 2	0
Stage 3	40
Stage 4	20
Visual Acuity Outcome: Change in mean LogMAR pre/post-surgery	0.315 (p>0.05)
Lens fragment Removal (n=5)	
Visual Acuity Outcome: Change in mean LogMAR pre/post-surgery	1.42 (p<0.05)
Vitreous haemorrhage (n=5)	
Visual Acuity Outcome: Change in mean LogMAR pre/post-surgery	1.16 (p<0.05)
Vitreo-macular traction (VMT) (n=3)	0.504 (
Visual Acuity Outcome: Change in mean LogMAR pre/post-surgery	0.584 (p<0.01)
Retinal detachment Surgery (n=1)	
Visual Acuity Outcome: Change in mean LogMAR pre/post-surgery	No change

#### Discussion

The findings of our study are intended to help improve and strengthen our services for this ethnic group.

Our data indicates that the most frequently performed VR surgery was macular hole repair, achieving excellent anatomical success postoperatively with stable visual outcomes. ERM peel surgery demonstrated good anatomical success, reflected by a reduction in macular thickness and maintained stable visual outcomes. Surgeries for lens fragments, vitreous haemorrhage and VMT resulted in statistically significant improvements in visual acuity.

## Conclusion

This is the first study of its kind in the UK, focused on Nepalese population. The results are encouraging with no surgical complications.

## **Future Strategies**

• Enhance awareness and implement targeted programmes within the Nepalese population to promote early detection and timely surgical intervention for VR conditions.