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A Clinical Study of Myopia

Dr. M. Parni Kumar[1], Dr. G. Manjula[2]

[1]M.S, HOD, Professor of Ophthalmology

[2]M.S, D.O, Associate Professor of Ophthalmology, Guntur Medical College, Guntur

Abstract: ***Clinical study of myopia in patients attending OPD in department of ophthalmology, GGH, Guntur.***

Keywords: myopia, keratometry, A-scan

1. Aims & Objects

Study of incidence of myopia in age group 10-40 yrs during period from November 2011-october2013. A total of 100 cases of myopia of 3D and >3D myopia evaluated.

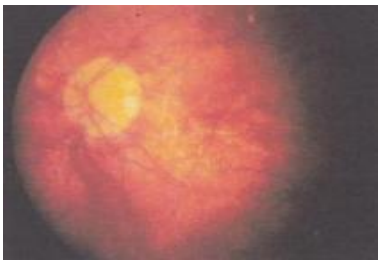
2. Methods & Materials

A detailed case history and family history taken. Slit lamp examination of anterior segment and posterior examination done by ophthalmoscopy and retinoscopy done in all cases A-scan biometry and keratometry where were done to determine the type of myopia.

3. Introduction

Incidence of myopia is more among the people of presenting to OPD, GGH, Guntur- 1% myopia in age assessed.

4. Fundus Findings in High Myopia



Lacquer cracks in high myopia

Foster-Fuchs spots in high myopia

5. Observation & Results

Graph showing no of patients examined age wise

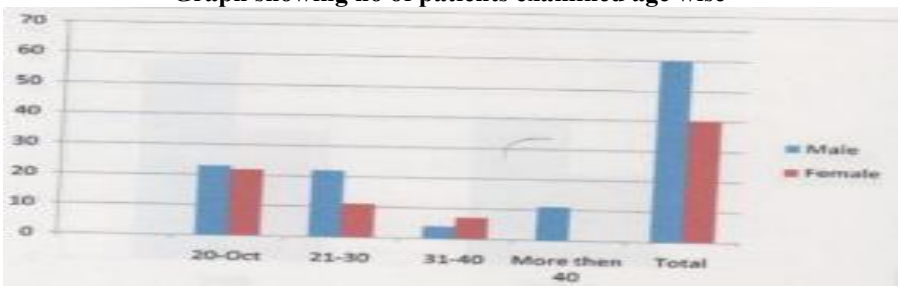


Table showing Hereditary incidence

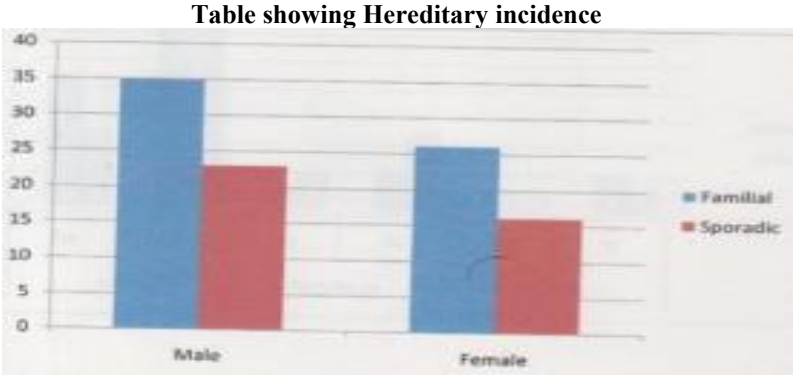


Table showing Etiological types

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	Axial		Curvature		Mixed	
	No	%	No	%	No	%
Males	45	75	6	12.75	7	12.25
Females	26	66.25	12	27.25	4	6.5

Graph showing Etiological types:

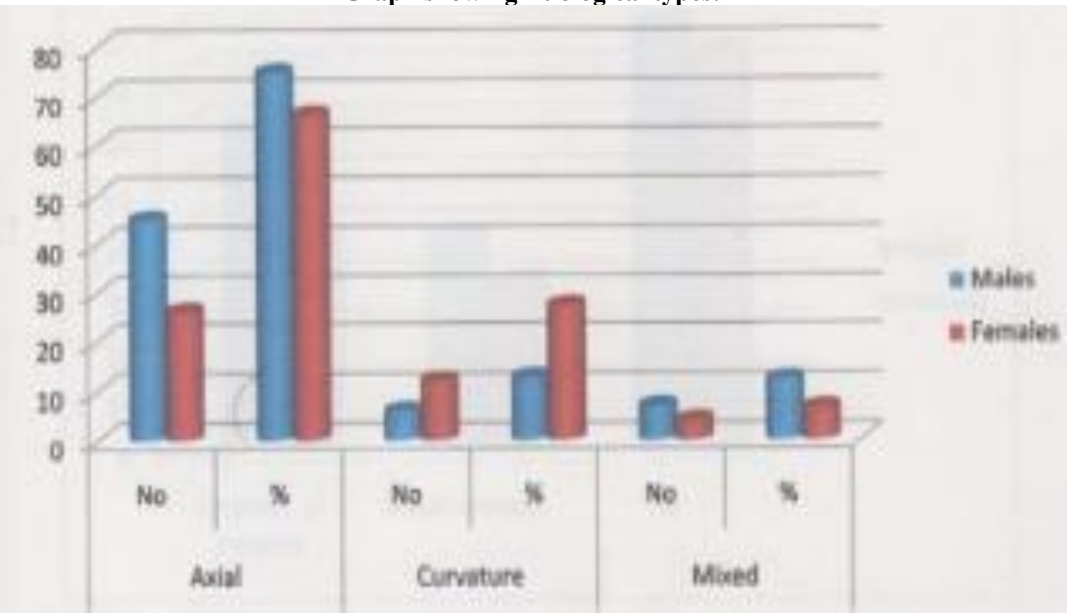

Table showing incidence of simple myopia:

	Total No. of Patients	Simple myopes	%
Males	60	40	80
Females	40	31	75

Graph showing clinical types of myopia:

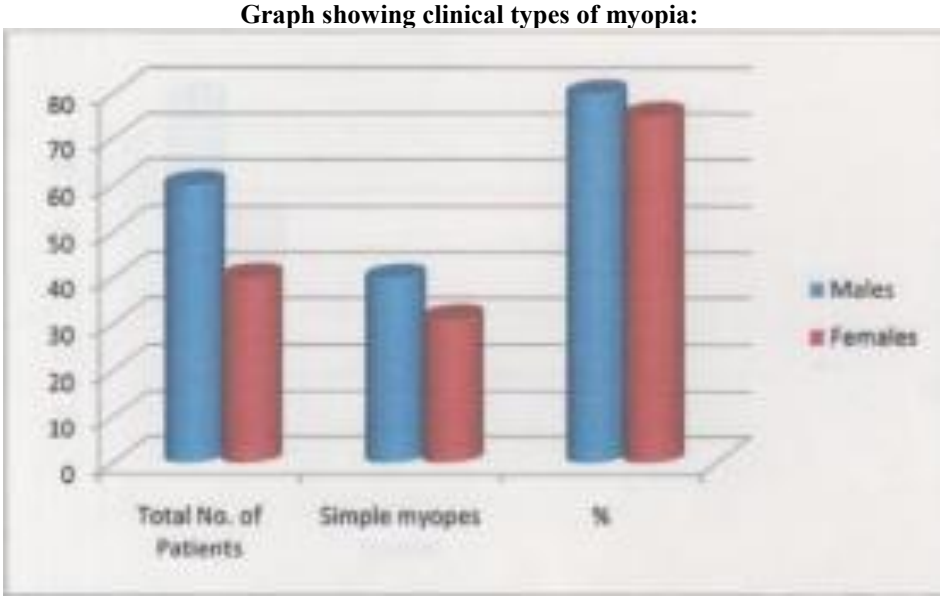

Table showing incidence of pathological myopia:

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Gender	Total No. of Patients	Pathological myopes	%
Males	60	20	20
Females	40	9	23

Graph showing incidence of pathological myopia:

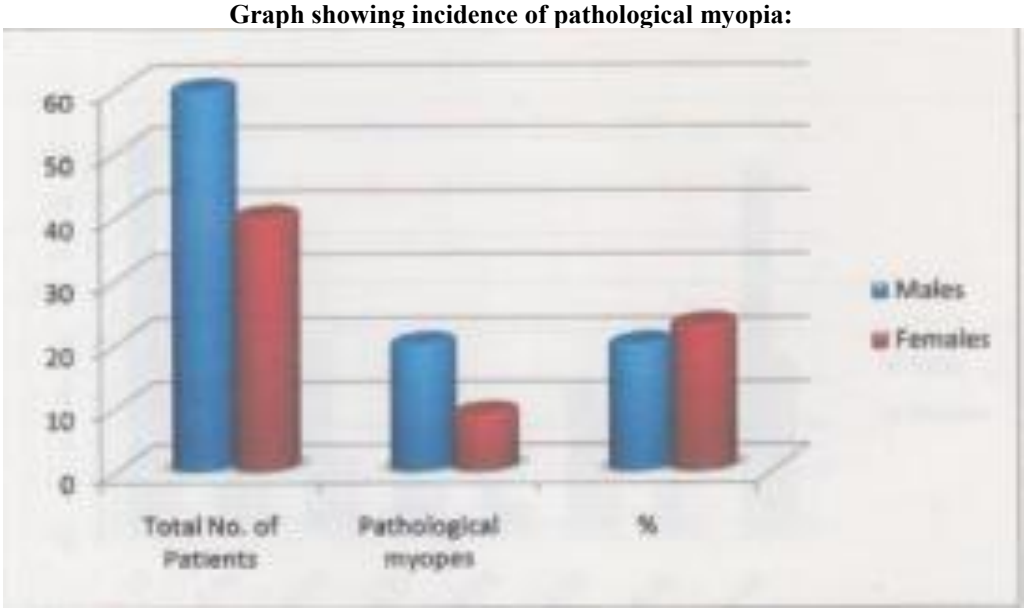

Table showing degree of myopia in dioptres:

Diopteric Power (D)	Male	Female
3-3.75	16	11
4-4.75	6	7
5-5.75	8	3
6-6.75	6	4
7-7.75	3	1
8-8.75	6	5
9-9.75	2	0
10&>10	15	7

Graph degree of myopia in dioptres:

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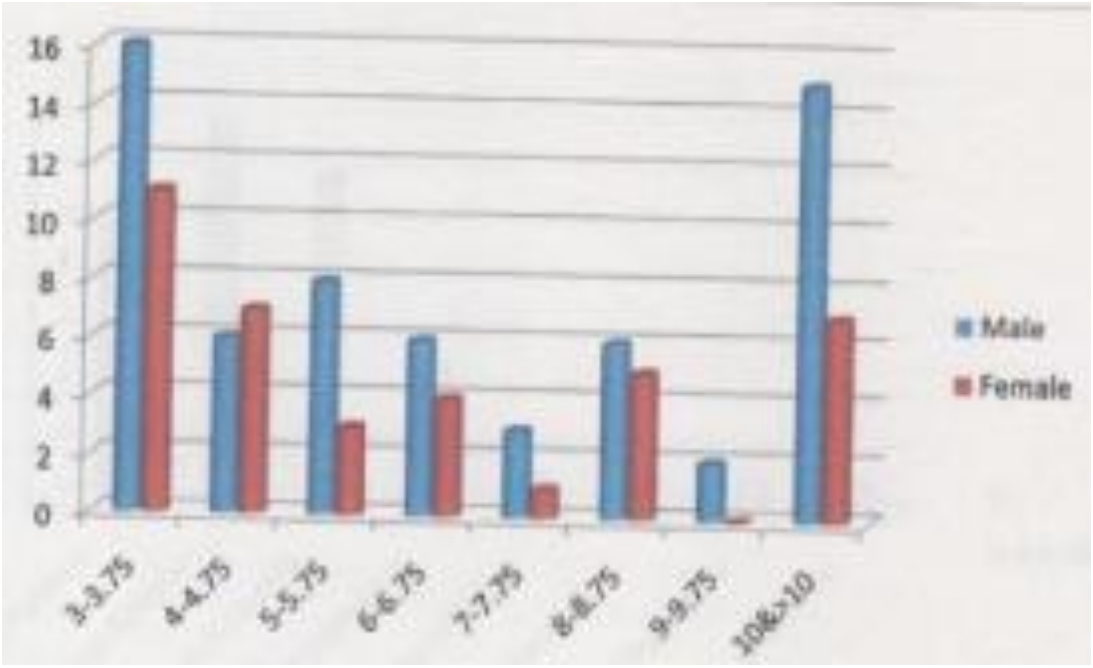
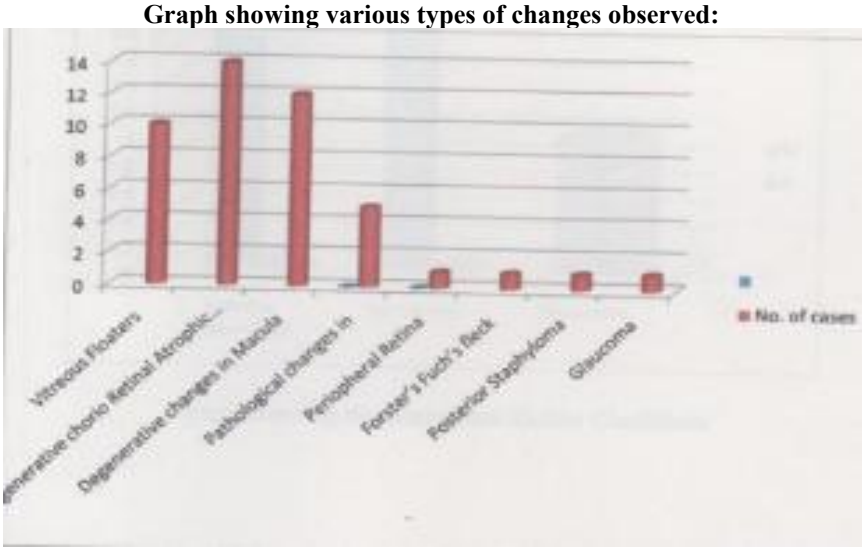


Table showing various types of changes observed:

Pathological change		No. of cases
Vitreous Floaters		10
Degenerative chorio Retinal Atrophic patches		14
Degenerative changes in Macula		12
Pathological changes in Periopheral Retina	Lattice	5
	Cystoid	1
Forster's Fuch's fleck		1
Posterior Staphyloma		1
Glaucoma		1

Graph showing various types of changes observed:



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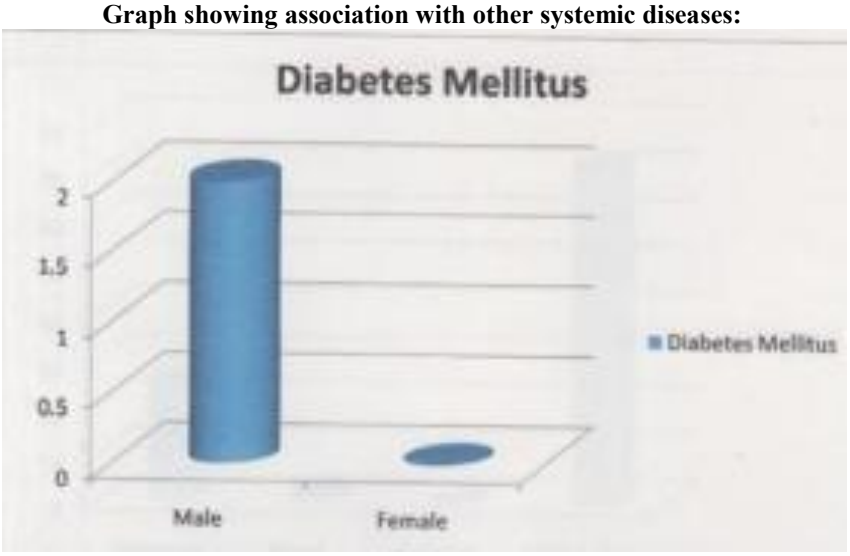
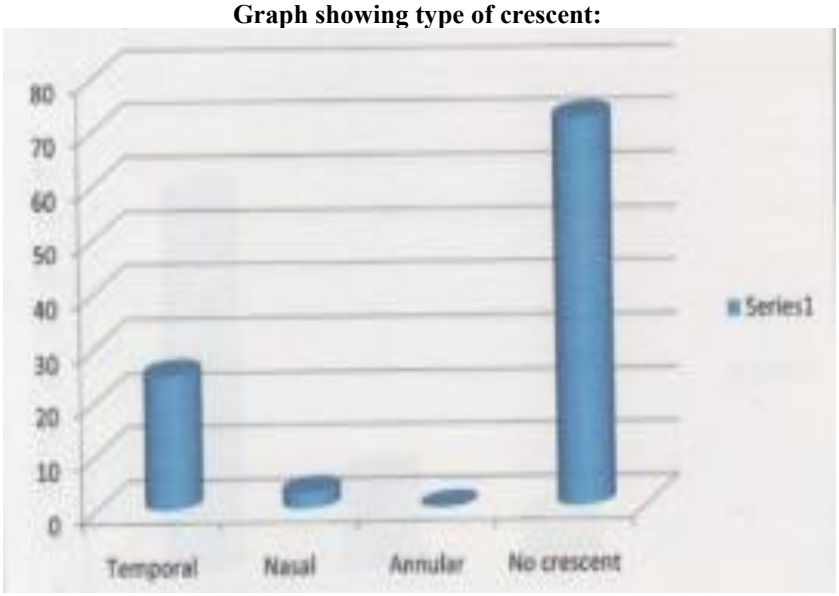
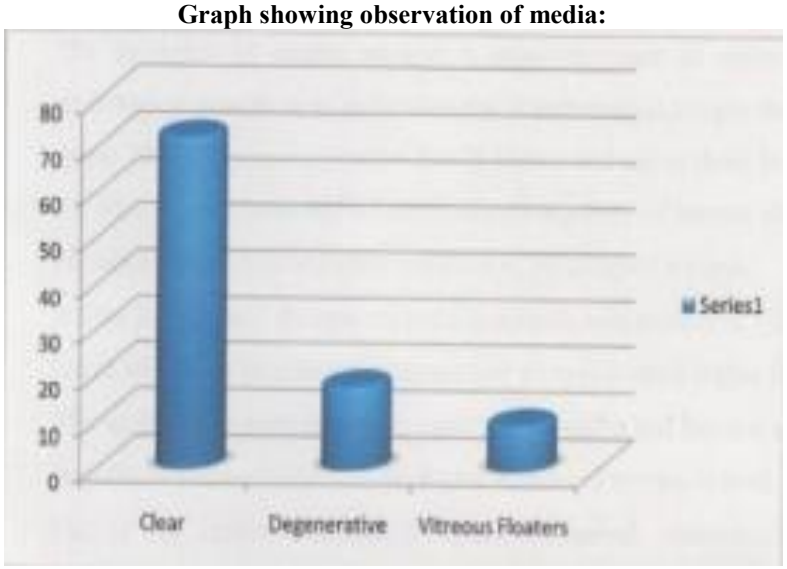
Graph showing association with other systemic diseases:



Graph showing type of crescent:



Graph showing observation of media:



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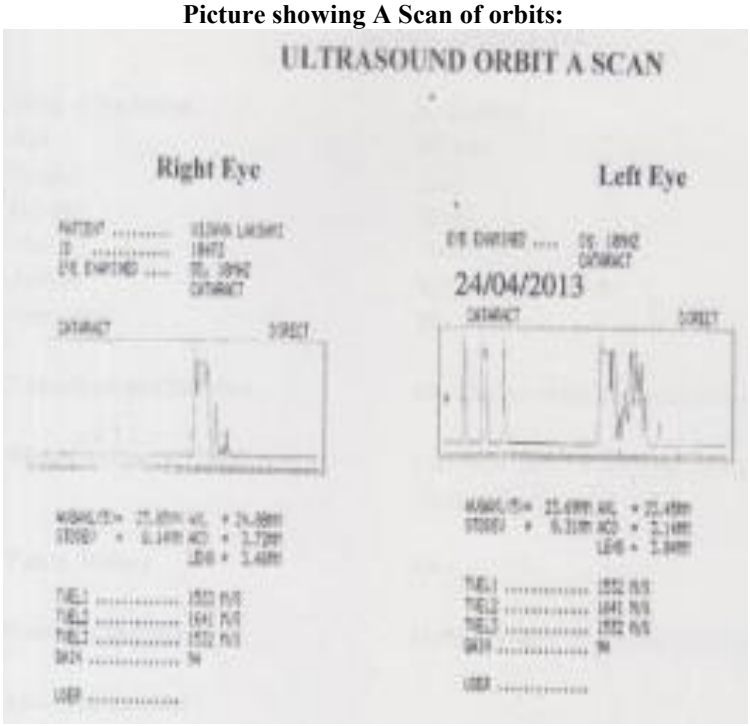
Picture showing A Scan of orbits:



6. Discussion

A clinical study of myopia in case 400 patients selected in the age people 10-40yrs in GGH, Guntur. In all these patients detailed anterior segment examination with slit lamp examination. Posterior segment examination done by direct and indirect ophthalmoscopy, Retinoscopy was done. Finally subjective correction done and glasses prescribed.

7. Conclusion

1) Myopia is an important public health problem which entails substantial social and personal costs.
2) The mean age of the 469 COMET children as base line is 9.3yrs. (Range 6-11yrs) it has been shown that myopia stabilizes somewhere between 18-23yr of age.
3) Sex ratio don't differ significantly between males and females. 52% of 469 COMET children are female. Incidence of pathological myopia is much higher in femails and in patients with family history of myopia.
4) In the present study positive family history is obtained in 61%. The rest are sporadic cases.
5) Grade of myopia is described moderate (3 to -6D) 51% are commoner than high myopia is 22%
6) In the current study mean IOP is definitely raised in high myopes and may be a risk factor for POAG development. Max number of patients is normotensive with mean IOP 16.02 – 20.23 +_0.52
7) 10%cases are associated with other ocular conditions out of which retinitis pigmentosa is the commonest ocular condition associated with myopia, 2%cases are associated with DM.
8) An undue ocular fatigue should be avoided.
9) Public need to be educated about signs and symptoms of refractive error.

References

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