

Clinical Study of Lens Induced Glaucoma

Dr. M. Parni Kumar¹, Dr. G. Manjula²

¹M.S, HOD, Professor of Ophthalmology

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

Abstract: *The study of cases of lens induced glaucoma patients in OPD Ophthalmology department, Govt General Hospital, Guntur. During two years period from November 2011 to October 2013.*

Keywords: Glaucoma, cataract, Intra Ocular Tension, Corneal Edema

1. Aims and Objects

The diagnosis of cases of Lens Induced Glaucoma and its clinical manifestation of Lens Induced Glaucoma, differential diagnosis cataract with POAG. A total of 66000 cases attended OPD GGH during 2011-2013. 66 cases presented with LIG. Incidence of LIG=0.103%.

Study conducted in OPD OPHTHALMOLGY GGH GNT during 2 years period 2011 November to 2013 October. Out of these, cases are in the age group of > 50yrs = 78%. In age group of 45 – 50 = 20%. 2% in below age of 40yrs.

Incidence: In our study incidence is more in females 60%.

2. Methods and Materials

3. Observation and Results

Table showing incidence in different age groups:

Age Group in Years	No of Cases	Percentage
0-40	1	2%
41-50	10	20%
51-60	17	34%
>60	22	44%

Graph showing incidence in different age groups:

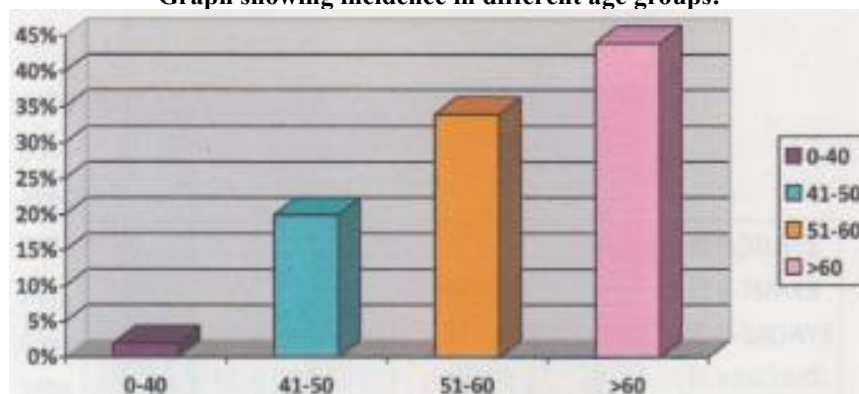


Table showing duration of symptoms:

Duration in days	No of cases	Percentage
0-3 DAYS	19	38%
4-7 DAYS	15	30%
8-14 DAYS	10	20%
>14 DAYS	6	12%

Graph showing duration of symptoms:

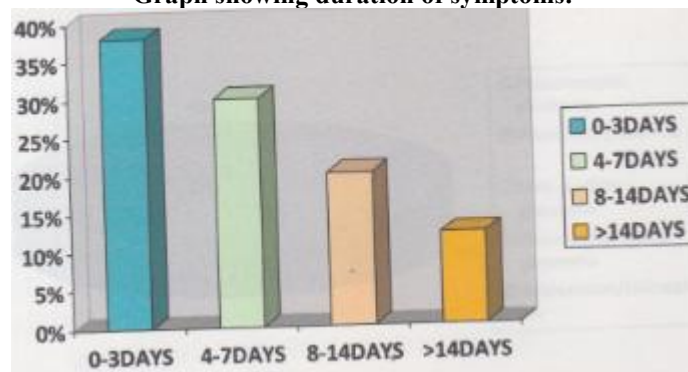
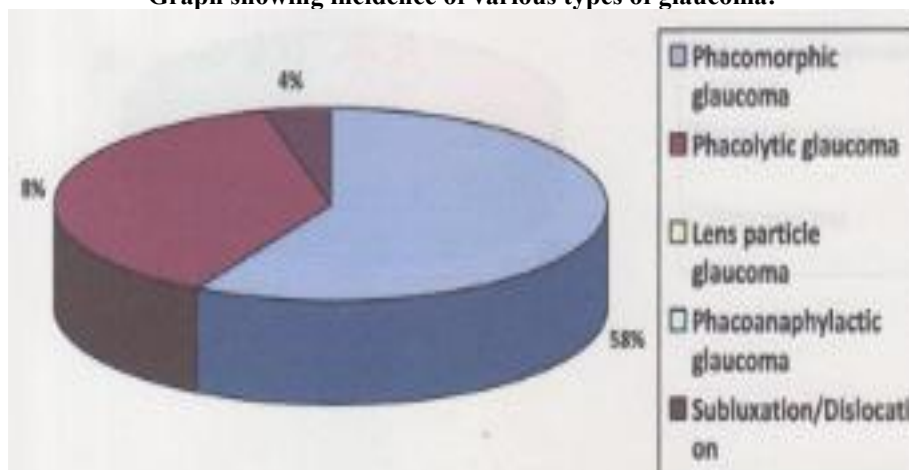


Table showing incidence of various types of glaucoma:

Aetiological Diagnosis	No of Patients	Percentage
PHACOMORPHIC GLAUCOMA	29	58
PHACOLYTIC GLAUCOMA	19	38
LENS PARTICLE GLAUCOMA	Nil	Nil
PHACOANAPHYLACTIC GLAUCOMA	Nil	Nil
SUBLUXATION/DISLOCATION	02	04

Graph showing incidence of various types of glaucoma:



Graph showing etiology of lens induced glaucoma:

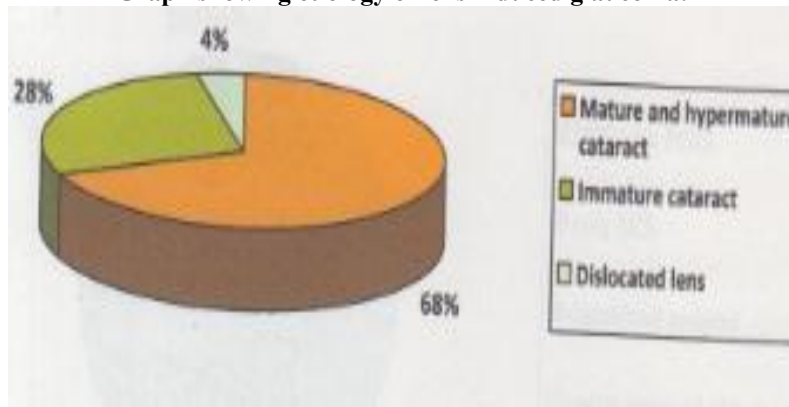


Table showing types of surgery performed:

Type of Surgery Performed	No. of Cases	Percentage
SICS with PCIOL	47	94%
Only SICS	1	2%
Combined surgery (SICS with PCIOL and Trabeculectomy)	1	2%
Vectis removal of lens with anterior vitrectomy	1	2%

Graph showing types of surgery performed:

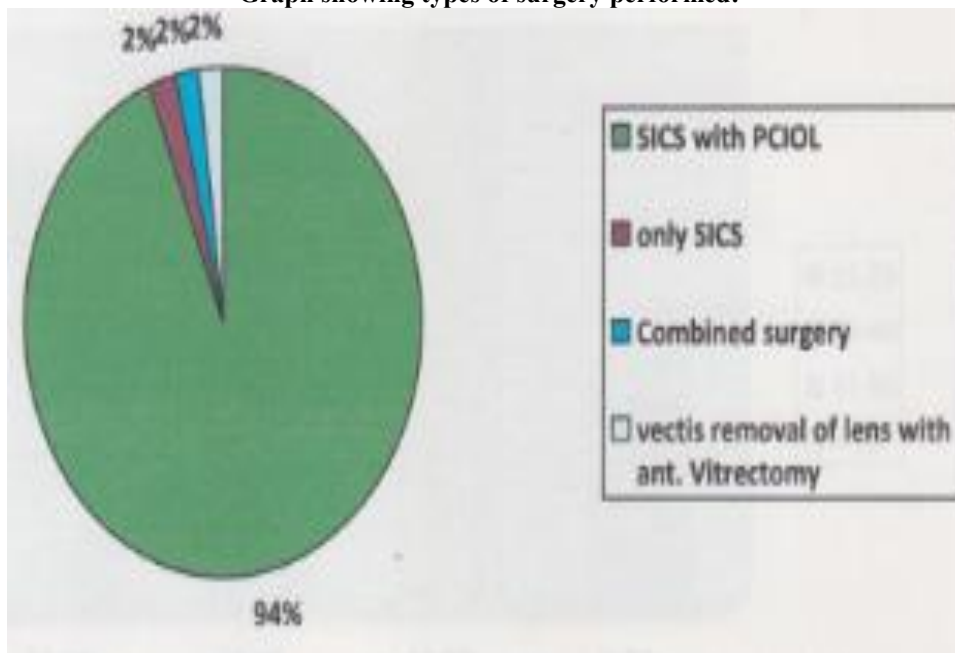


Table showing range of IOP at admission time:

Range of IOP	Number of Cases	Percentage
21 - 25 mmHg	2	4%
26 - 40 mmHg	19	38%
41 - 50 mmHg	20	40%
> 50 mmHg	9	18%

Graph showing range of IOP at admission time:

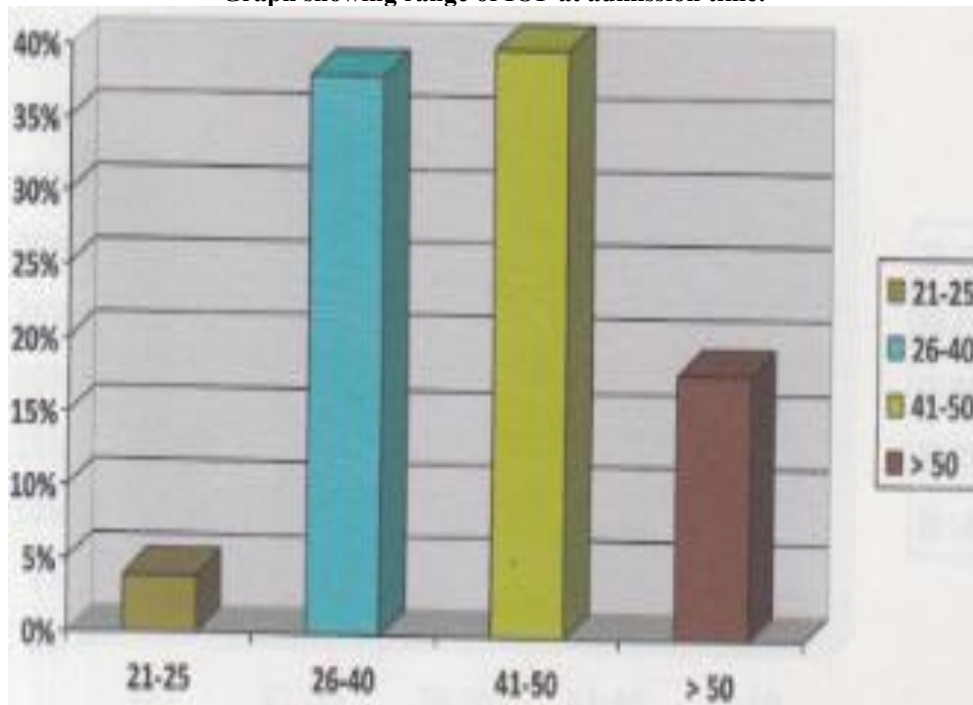


Table showing range of IOP response to pre-operative medical therapy:

RANGE OF IOP IN RESPONSE TO PRE- OPERATIVE MEDICAL THERAPY		
Range of IOP	No. of Patients	Percentage
< 21 mmHg	8	16
21 - 25 mmHg	22	44
26 - 30 mmHg	14	28
31 - 40 mmHg	4	8
>40 mmHg	2	4

Graph showing range of IOP response to pre-operative medical therapy:

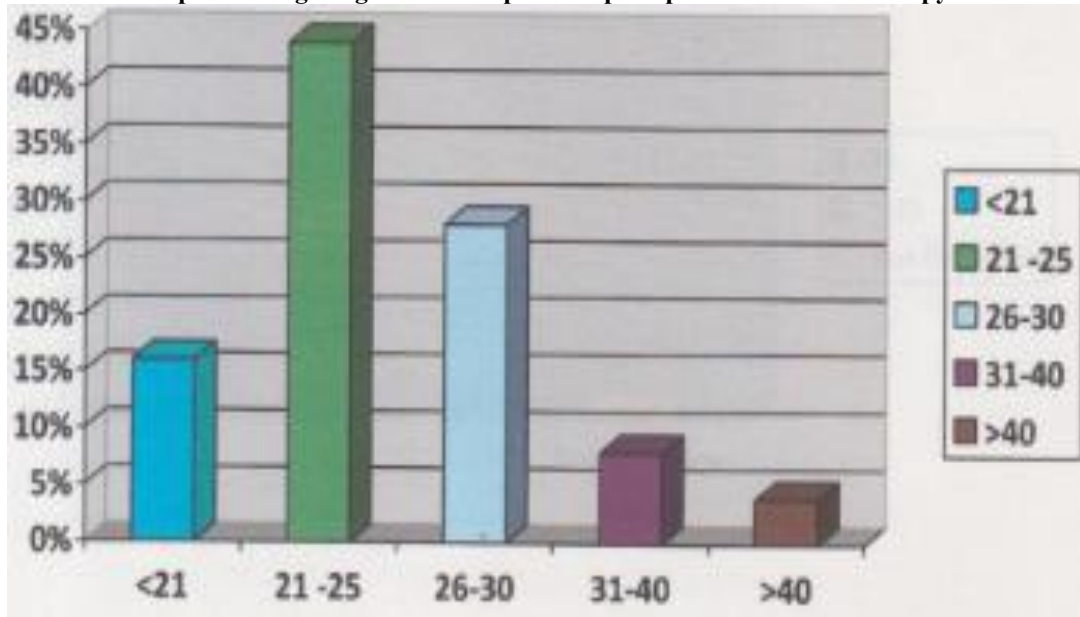


Table showing range of IOP at 6wks post operatively:

Range of IOP	No. of Patients	Percentage
< 21 mmHg	45	90
> 21 mmHg	2	4
Lost for review	3	6

Graph showing range of IOP at 6wks post operatively:

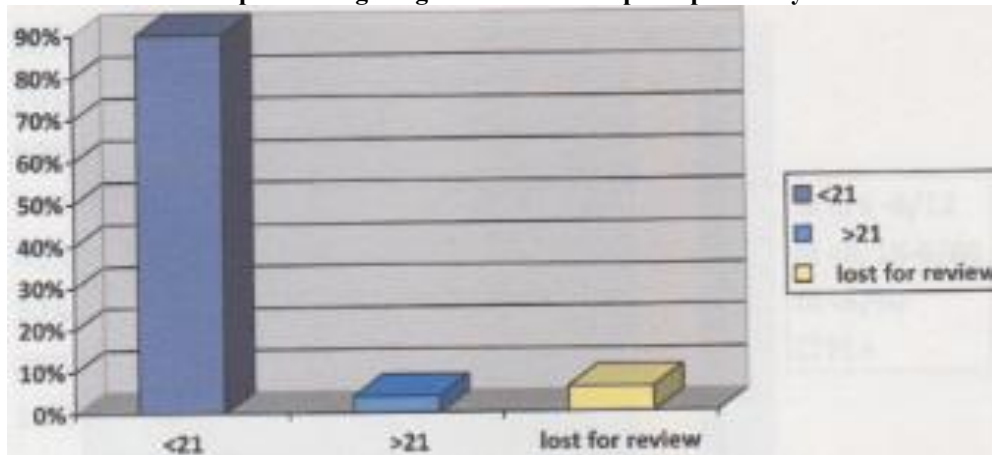


Table showing visual acuity at presentation in LIG:

Visual acuity	No. of Patients	Percentage
6/6 - 6/12	Nil	Nil
< 6/18 - 6/60	Nil	Nil
< 6/60	10	20%
Only PL+	40	80%

Graph showing visual acuity at presentation in LIG:

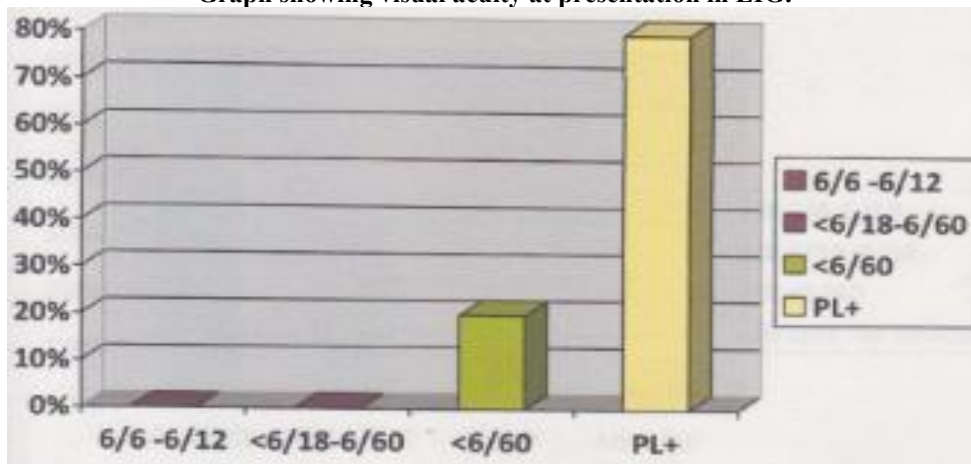


Table showing Best corrected Visual acuity at 6 weeks post operatively:

Best Corrected Visual Acuity	Number of Patients	Percentage
6/6 - 6/12	30	60
6/18 - 6/60	15	30
< 6/60	2	4
Lost for Review	3	6

Graph showing Best corrected Visual acuity at 6 weeks post operatively:

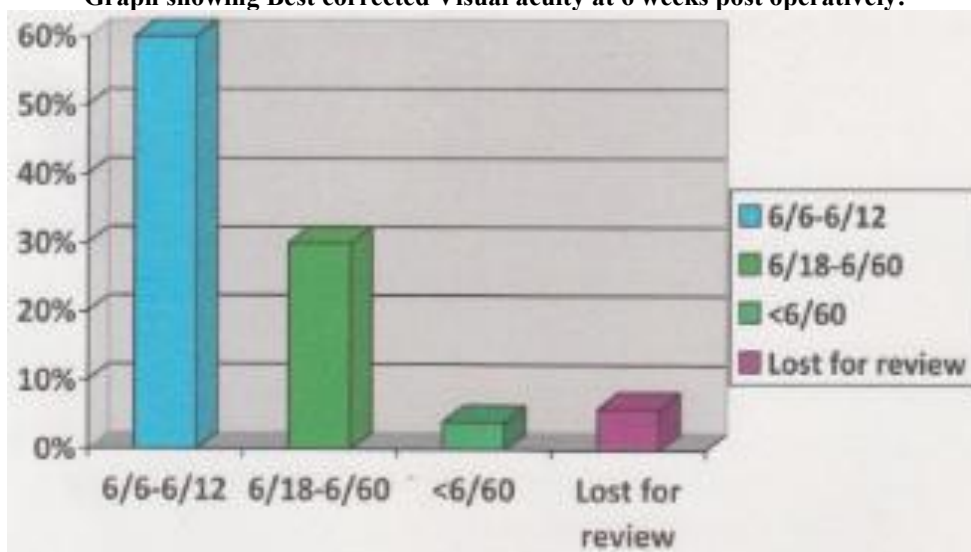


Table showing visual outcome in relation to duration of symptoms:

Duration of Symptoms	6/6 - 6/12	6/18 - 6/60	< 6/60	Lost For Review
0 - 3 DAYS	19 (38%)	Nil	Nil	Nil
4 - 7 DAYS	9 (18%)	5 (10%)	Nil	1(2%)
7 - 14 DAYS	2 (4%)	8 (16%)	Nil	Nil
> 14 DAYS	Nil	2 (4%)	2(4%)	2(4%)

4. Discussion

In the present study IOP of the average 40 -50 mmHg in 40% cases, In 38% 26 – 40 mmHg, in 4% 21 – 26mmHg. There was no specific variation in IOP between phacomorphic glaucoma and phacolytic glaucoma. Duration of symptoms in our study 38%attended hospital in 3days. 30% cases after 3days but within 7days. The delay in taking treatment is due to good visual acuity in other eye, lack of awareness, poverty, lack of education and transport facilities. The presenting symptoms was pain, redness circum corneal congestion, conjunctival congestion, corneal odema and hazy cornea, which decreased after IOP is controlled, shallow A/C was seen Phacomorphic glaucoma. Majority of cases pupil was dilated at examination. Range of IOP- control of IOP is under normal limits with medical therapeutics in 60% cases.

80% patients presented with visual acuity of perception of light, projection of light 4 quadrants, 20% presented with vision <6/60.

IOP after 6weeks Post Operative

Control of IOP after 6 weeks post operative was within normal limits in 90% cases. 4% cases has sever post operative iritis, corneal hazy seen in 20% cases,

BCVA 6weeks— 6/6 - 6/12 – 60%
 6/18 – 6/60 – 30%

Visual outcome in relation to duration of symptoms- in our study all patients attended the OP in 3 days attained visual acuity 6/12.

5. Conclusion

- 1) The majority of lens induced glaucoma cases observed i.e 78% in age group of 50 yrs.
- 2) The incidence of lens induced glaucoma was more in females 60%.
- 3) 38% patients consulted in 3days, 30% have consulted after 3days with in 7days.
- 4) 96% lens induced glaucoma cases had IOP >26mmHg, 18% IOP >50mmHg.
- 5) Phacomorphic glaucoma was most common type58%, followed by phacolytic glaucoma 38%.

- 6) In 60% cases improvement of vision is 6/12, in 30% cases 6/18 - 6/60, in 4% cases <6/60, visual outcome is better in phacomorphic glaucoma.
- 7) Patient who get BCVA of 6/6 – 6/12 are more among these who attended the hospital with in 3days.

References

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