A CLINICAL STUDY OF OCULAR CAUSES OF HEADACHE

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NO FINANCIAL DISCLOSURE



INTRODUCTION:

- ➤ Headache is defined as pain experienced in and around the cranial vault
- ➤ Common causes of headache is described as two types 1)primary headache causes :tension type headache, migraine, cluster headache .
- > 2)secondary headache causes : systemic infections, head injury, space occupying lesions, and vascular disorders.
- Most common ocular causes of headache is refractive errors, convergence insufficiency, heterophoria, heterotropia, increased intra ocular pressure.

➤ Headache is also presented with eye strain, photophobia, raised iop, nausea, repeated blinking, vertigo.



AIM:

> To enumerate the ocular causes of headache.

OBJECTIVES:

- > To asses the various ocular manifestations in patients with headache.
- > To study the various causes of headache and early diagnosis of various causes of headache.
- > To assess the severity of ocular manifestations in patient who present with headache.



MATERIALS AND METHODS:

- > This is a hospital based cross sectional study.
- > This clinical study on ocular causes of headache and also characterization of the headache in these cases.
- ➤ About 100 cases are studied all these taken from both in and out patients in department of ophthalmology, greh .
- ➤ Data obtained through detailed history which includes patient present complaints, past history and associated systemic diseases.
- Examine the patient visual acuity and ocular examination include anterior segment, IOP, gonioscopy, retinoscopy, fundus examination.
 - Systemic evaluation include CBC, BP, lipid profile, 2D echo if necessary.



INCLUSION CRITERIA:

- ➤ Patient who are presented with complaining of headache in outpatient and in patient in department of ophthalmology.
- > who are giving consent to do ocular examination.

EXCLUSION CRITERIA:

- > Patient who are giving only complaint of diministion of vision
- ▶ patient who are already diagnosed with systemic diseases and treated that systemic diseases
- patient who are not willing to give consent.



METHODOLOGY:

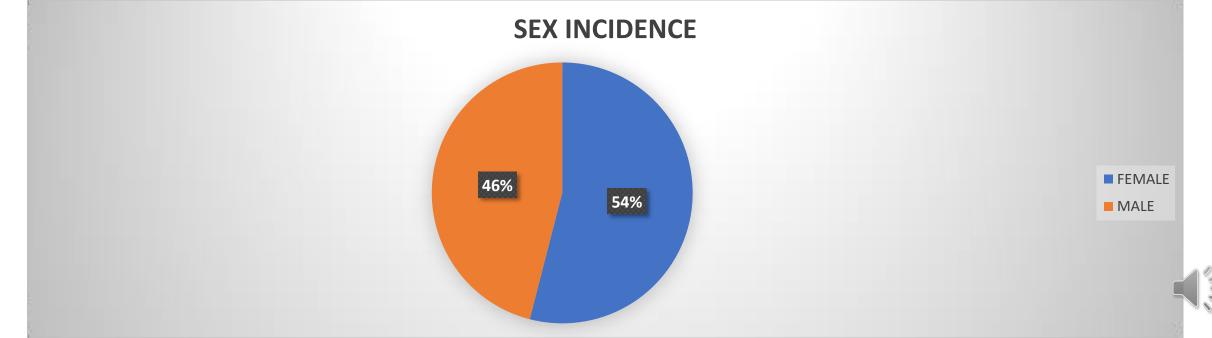
- Taking careful detailed history about from the patient in case of headache which will include mode and time of onset, periodicity, site, quality, aggrevating & relieving factors, and associated features.
- > Doing general physical examination and systemic examination.
- ➤ Visual acuity is recorded for distance and near point convergence.
- Local examination starts with headposture, facial symmetry, and then anterior segment examination with slit lamp bio microscopy, extraocular movements, fundus examination, cover and uncover test, retinoscopy.



RESULTS:

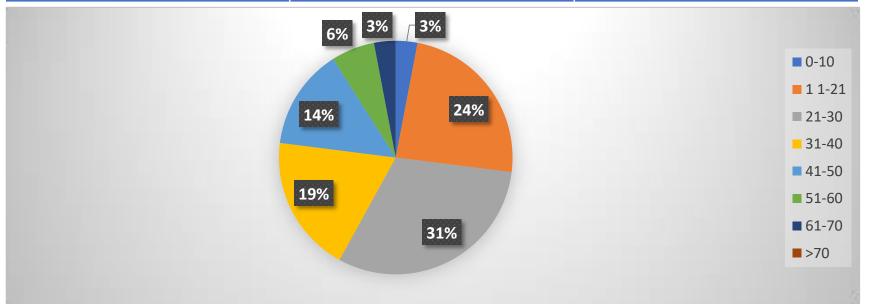
totally 100 patients fulfilling the inclusion criteria were included in the study. SEX INCIDENCE OF OCULAR CAUSES OF HEADACHE

SEX	NO. OF CASES	PERCENTAGE
MALE	46	46%
FEMALE	54	54%



AGE DISTRIBUTION OF OCULAR CAUSES OF HEADACHE:

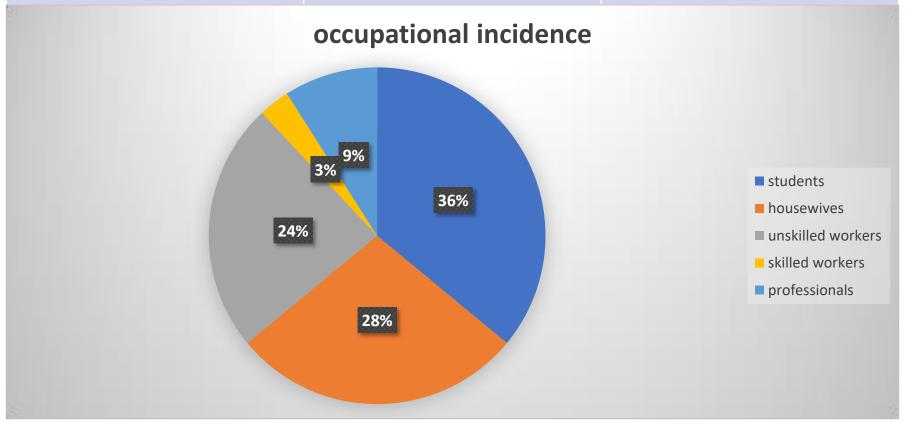
AGE IN YEARS	NO. OF CASES	PERCENTAGE
0-10	3	3%
11-20	24	24%
21-30	31	31%
31-40	19	19%
41-50	14	14%
51-60	6	6%
61-70	3	3%
>70	nil	nil





Occupational incidence of ocular causes of headache:

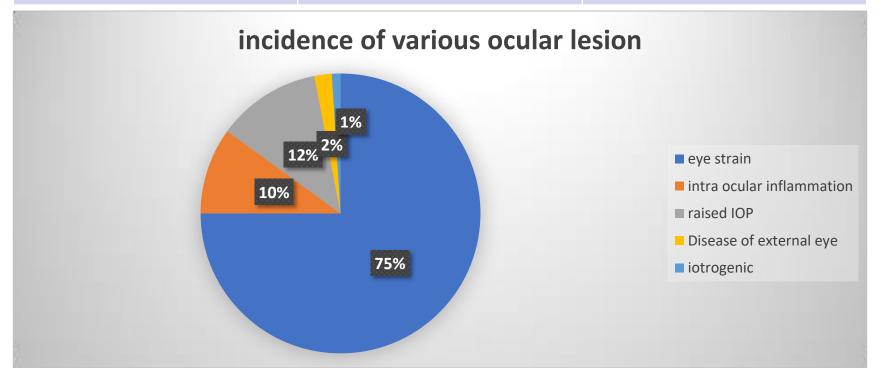
occupation	No.of cases	percentage
students	36	36%
housewives	28	28%
Unskilled workers	24	24%
Skilled workers	3	3%
professionals	9	9%





INCIDENCE OF VARIOUS OCULAR LESIONS CAUSES HEADACHE:

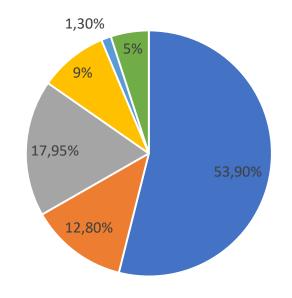
OCULAR CAUSE	NO.OF CASES	PERCENTAGE
Eye strain	75	75%
Intra ocular inflammation	10	10%
Raised Intra ocular pressure	12	12%
Diseases of external eye and adnexa	2	2%
iotrogenic	1	1%





RELATIVE INCIDENCE OF VARIOUS CAUSES OF EYE STRAIN IN OCULAR CAUSES OF HEADACHE:

Causes of eye strain	No.of cases	percentage
Refractive errors	35	53.9%
Convergence insufficiency	10	12.8%
Accommodative insufficiency	14	17.95%
Heterophorias	7	9%
Heterotropia	1	1.3%
Systemic diseases	5	5.05%





CHARECTERISATION OF HEADACHE OF OCULAR ORIGIN:

MODE OF ONSET	NO.OF CASES	PERCENTAGE
Insidious	79	79%
Sub acute	7	7%
acute	14	14%

PERIODICITY	NO.OF CASES	PERCENTAGE
intermittent	73	73%
constant	27	27%

TIME OF ONSET	NO.OF CASES	PERCENTAGE
Morning	26	26%
Day time	12	12%
Evening	52	52%
Night	10	10%



SITE OF PAIN	NO.OF CASES	PERCENTAGE
Peri orbital one side two side	24 44	24% 44%
occipital	2	2%
Generalised	30	30%

RELIEVING FACTORS	NO.OF CASES	PERCENTAGE
Rest of the eyes	35	35%
analgesics	20	20%
No specific relieving factors	45	45%

ASSOCIATED SYMPTOMS	NO.OF CASES	PERCENTAGE
Pain with or without symptoms	49	49%
watering	18	18%
Blurring of vision	26	26%
Systemic factors	7	7%



DISCUSSION:

- In our study, we found that most of the patients who are complaining with headache are having refractory errors.
- In occupational wise student are more prone to getting headache and having refractory errors.
- Incidence of headache is more common in females due to migraine, sinusitis etc.
- Most of the cases eyes strain is the common ocular cause for headache which is probably due to more exposure to digital screen and uncorrected refractory errors.



CONCLUSION:

- Out of 100,35(53.9%)has refractive errors,10(12.8%)has convergence insufficiency,14(17.95%)has accommodative insufficiency,7(9%)has heterophorias,1(1.3%)has heterotropias,5(5%)has systemic diseases. Majority were in the age group between 21-30yrs(31%)in which 13% males,17% females and least are under 0-10 and 61-70 years(3%).
- study is useful for early detection and management of refractive errors and accommodative squint and distinguishing the other causes of headache like migraine, sinusitis, and systemic diseases like hypertension and benign tumours.



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