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A STUDY OF THE PREVALENCE OF DRY EYES IN PATIENTS ATTENDING THE OUT PATIENT DEPARTMENT IN A GOVERNMENT HOSPITAL AND ITS SEVERITY

Ophthalmology

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KEYWORDS

AIM

- To study the prevalence of dry eyes in patients attending the out patient department.
- To evaluate its severity in different age groups

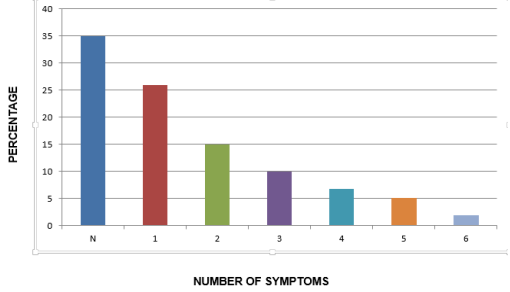
MATERIALS AND METHODS

The study was conducted in a government peripheral hospital in Annanagar Chennai for a period of about 6 months from June 2018 to November 2018.The study group consisted of patients in the age group 15 to 65 years.and a total of about 500 people were included in the study. A questionnaire regarding age,sex.occupation any,associated systemic illness the duration and signs and symptoms was completed by the patients. Exclusion criteria included patients below 15 years and above 65 years. Patients were graded according to the severity of the signs and symptoms and tear function tests. Dry eyes were suspected on the basis of a history of ocular discomfort, including foreign body or gritty sensation. ocular irritation, itching and burning, blurred vision that improves with blinking, excess tearing, heaviness of eyelids .The condition was confirmed by doing schirmer test without topical anaesthesia -normal result is over 15 mm .5 10 mm is borderline and less than 5mm indicates impaired secretion and tear break up time of less than 15 secs as abnormal [American academy of ophthalmology] . A thorough ocular examination was done such as visual acuity, slit lamp examination for any lid abnormalities, conjuctival surface disorders ,corneal degenerations, keratopathy –puctuate epitheliopathy, filament and, mucus plaques and fundus examination by direct and indirect ophthalmology and intra ocular tension Other systemic evaluation included routine lab investigations like blood sugar, urea, creatinine,and blood pressure.

RESULTS AND ANALYSIS

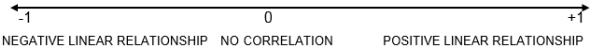
Out of 500 patients studied 325 had dry eyes.Out of which 175 were in the age group 15-30,100 in the age group 31-45and 50 in the group 46-50.,The maximum dry eyes were observed in patients using visual display systems [computers and cell phones] for longer durations and for longer periods.[more than 8 hours and for more than a year] as elicited from the history.

OCULAR SYMPTOMS



The statistical analysis was based on probability value p and spearman rank order correlation. The spearman formula is a measure of the strength and direction of association that exists between 2 variables measured on a ordinal scale. It is identified by the symbol rs[rho]

INTERPRETATION OF r



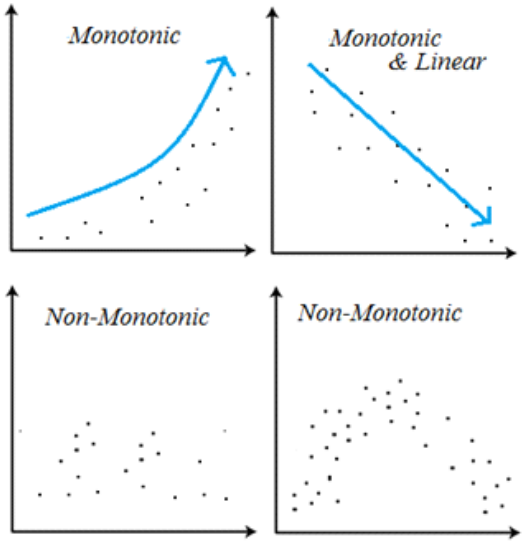
$$R_S = 1 - \left(\frac{6 \in d^2}{n^3 - n}\right)$$

VALUE OF r

Position of Negativity	Meaning
0.00-0.19	very weak
0.20-0.39	weak
0.40-0.69	moderate
0.70-0.89	strong
0.90-1.00	very strong

The study result showed a spearman value of 0.80 suggestive of a strong relationship between dry eyes and visual display system users for longer duration.

There is a monotonic relationship –As the strength of one variable increases, so does the strength of the other.



Also a p value of <.0.005 significantly proves the prevalence of dry eyes more in people using computer and cell phones for longer hours

CONCLUSION

In our study population the prevalence of dry eyes was more in the age group of 15 -30 years .The severity was more in people using visual display systems [computers and cell phones] for long hours. Management for dry eyes included frequent blinking decreased usage of visual display systems tear substitutes treatment of systemic disorders and surgical correction of lid abnormalities..Early diagnosis and management helped in preventing complications resulting from dry eyes.

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