



OCULAR MANIFESTATIONS IN DERMATOLOGICAL DISORDERS

Ophthalmology

Dr. N. Jeyanthi

Associate Professor, Department Of Ophthalmology, Kurnool Medical College, Kurnool, Andhra Pradesh.

Dr. K. Nagarani*

Post Graduate, Department Of Ophthalmology, Kurnool Medical College, Kurnool, A. P. State *Corresponding Author

ABSTRACT

Aim : To analyze the magnitude and pattern of ocular conditions and pathologies as seen in patients who were referred to the Ophthalmology department from dermatology department.

Methods : A total of 100 patients with ocular manifestations of all age groups who were referred from dermatology department during the period June 2017 to June 2018 were examined which include visual acuity testing using Snellen's chart, refraction, slit lamp biomicroscopy. Ocular complications due to other causes like an injury were excluded from the study.

Results : Out of 100 patients, maximum cases were found in between 36-45 years age i.e. 29%, females are more commonly affected. Most common ocular manifestation is conjunctivitis seen in 33 patients. In the present study subjects, both eyes involvement was seen in 55% of cases, right eye in 31% and left eye 14% of cases. Common conditions were Herpes Zoster ophthalmicus (24%), Leprosy (22%), Pemphigus vulgaris (9%) and Stevens Johnson Syndrome (7%).

Conclusion : In our study, herpes zoster ophthalmicus, leprosy, pemphigus vulgaris, and SJS, are the most common dermatological disorders with ocular manifestations. Patients with the above dermatological disorders had significant ocular manifestations for which early intervention can prevent the ocular morbidity.

KEYWORDS

conjunctivitis, herpes zoster ophthalmicus, leprosy, pemphigus vulgaris, Stevens Johnson syndrome.

INTRODUCTION

The skin and mucous membranes and corneal epithelium share a common embryologic origin,¹ the surface epithelium derives from surface ectoderm, and the sub epithelial connective tissues and vascular components derive from mesoderm. Many skin disorders, therefore, can have ocular manifestations which may result in severe visual impairment. With the increasing population-based prevalence of some skin diseases, dermatologic conditions are associated with ocular complications more frequently than is usually recognized.²

Common ocular conditions associated with other dermatological diseases are Keratitis, uveitis, cataract, scleritis, episcleritis, conjunctivitis, Blepharitis, vesicles on eyelids, retinal hemorrhages, cotton wool spots, and optic neuropathy.

MATERIALS AND METHODS

A total of 100 patients of all age groups with dermatological disorders attending to Regional Eye Hospital, Kurnool during the period June 2017 to June 2018 were examined. Patients of all age groups with the involvement of at least one eye were included in the study.

Detailed history taking followed by detailed ocular and general physical examination in diagnosed cases of dermatological disorders, examination of adnexa and extraocular structures, detailed examination of anterior segment structures with slit lamp biomicroscope, visual acuity test. A dilated fundus examination with direct ophthalmoscopy. Intraocular pressure measurement.

The patients, visual acuity was measured using a Snellen's chart at 6 meters. If the visual acuity was less than 6/9, a pin-hole was used. If the patients had spectacles, visual acuity was tested with their spectacle correction. In pre-school non-verbal children, the visual acuity was recorded using Lea pictorial charts at 3 meters. In non-verbal children, the Lea gratings were used.

For patients with visual acuity worse than 6/18 and clear ocular media, retinoscopy was done the following which subjective refraction was done. In children needing retinoscopy, Cyclopentolate 1% drops were used to dilate the pupils.

Examination of the anterior segment was done using a torch and slit lamp. The pupils were then dilated with Tropicamide eye drops and a detailed examination of the fundus was carried out using binocular indirect ophthalmoscope or with a use of 90D lens.

RESULTS

Table 1: Distribution of age

AGE (in years)	Frequency	Percent
0-5Y	3	3.0
6-10Y	7	7.0
11-15Y	11	11.0
16-25Y	8	8.0
26-35Y	23	23.0
36-45Y	29	29.0
46-55Y	10	10.0
56-65Y	7	7.0
>66	2	2.0
TOTAL	100	100

Maximum cases were found in between 36-45 years age i.e. 29%, followed by 26-35 years age group (23%) and 11-15 years age group (11%)

Table 2: Distribution of gender

GENDER	Frequency	Percent
MALE	45	45.0
FEMALE	55	55.0
TOTAL	100	100

Table 3 : Distribution of study subjects according to ocular manifestations

OCULAR FINDING	Frequency	Percent
Conjunctivitis	33	33.0
Madarosis	10	10.0
Keratitis	10	10.0
Lagophthalmos	6	6.0
Cataract	4	4.0
Blepharitis	4	4.0

Table 4 : Laterality of eye involved

SITE	Frequency	Percent
RIGHT EYE	31	31.0
LEFT EYE	14	14.0
BOTH EYES	55	55.0
TOTAL	100	100.0

Table 5 : Distribution of study subjects according to dermatological diseases

DERMATOLOGICAL DISEASE	Frequency	Percent
Congenital melanocytic naevus	1	1.0

Dermatitis	6	6.0
H.Z.O	24	24.0
Halo naevus	1	1.0
Leprosy	22	22.0
Molluscum contagiosum	2	2.0
Naevus of Ota	5	5.0
Neurofibromatosis type-1	1	1.0
Pemphigus vulgaris	9	9.0
Port wine stain	2	2.0
Psoriasis	5	5.0
SJS	7	7.0
SLE	2	2.0
Systemic sclerosis	3	3.0
Tuberous sclerosis	3	3.0
Vitiligo	3	3.0
Xanthelasma	4	4.0
Total	100	100.0

DISCUSSION

The present study was conducted among 100 dermatological cases to study the incidence of ocular manifestations.

In this study, maximum cases were found in between 36-45 years age i.e. 29%, followed by 26-35 years age group (23%) and 11-15 years age group (11%).

In this study, males were 45% and females constitute 55% In this study, most common ocular manifestation was conjunctivitis (33%), followed by madarosis (10%), keratitis (10%), lagophthalmos (6%), cataract (4%), blepharitis (4%).

In this study, the most common dermatological disease was Herpes Zosterophthalmicus (24%), leprosy (22%), pemphigus (9%) and Stevens Johnson syndrome (7%).

In the present study, the prevalence of herpes zoster ophthalmicus is 24% (24 cases). In 24 cases 19 (79.2%) cases were found in adults and 5(20.8%) cases were found in the pediatric age group. Related to ocular findings 16 cases were seen with conjunctivitis and 2 cases with keratitis. Lid features were found in 23 cases. Most common lid feature was edema and vesicles among 12 cases. Only vesicles were found in 6 cases. Other features were vesicles on eyebrows and crusted erosions. In the present study, 22% of cases were leprosy cases accounting for 2nd most common dermatological disorder following herpes zoster ophthalmicus. All these cases were adults. 6 cases were found with lagophthalmos, 3 cases were with conjunctivitis, 10 cases were with madarosis and 8 cases were with keratitis. Other features were exposure keratitis, granulomatous Uveitis, leprosy nodules, erythematous dry scaly patches on eyebrows.

In pemphigus vulgaris: Conjunctivitis in 5 patients, cataract (steroid induced PSSC) in 4 patients, epiphora in 2 patients, lid erosions in 5 patients.

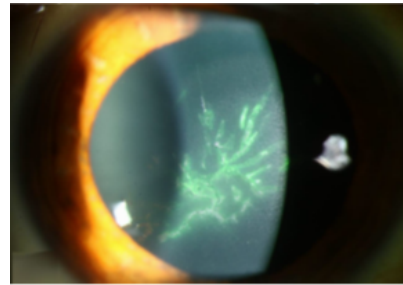
In Stevens Johnson Syndrome: Conjunctivitis in 6 patients, edema of lids in 7 patients.

CONCLUSION

In our study, herpes zoster ophthalmicus, leprosy, pemphigus vulgaris, and SJS, are the most common dermatological disorders with ocular manifestations. Patients with the above dermatological disorders had significant ocular manifestations for which early intervention can prevent the ocular morbidity.



Vesicles, Lid edema in Herpes Zoster Ophthalmicus



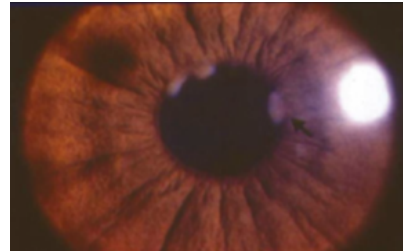
Pseudo dendritic Keratitis in Herpes Zoster Ophthalmicus



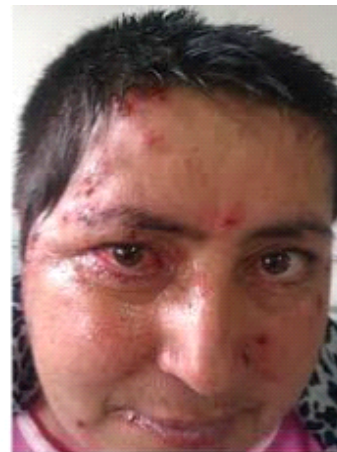
Lagophthalmos in Borderline tuberculoid leprosy



Conjunctivitis and matting of eyelashes in SJS



Granulomatous uveitis in Lepromatous leprosy



Conjunctivitis and erosions in Pemphigus vulgaris

REFERENCES

1. Duane, T.D., Tasman, W., & Jaeger, E. A. (2002). Duane's clinical ophthalmology on CD-ROM. Philadelphia, PA: Lippincott Williams & Wilkins.
2. CHILD F J, Fuller LC, Higgins EM and Vivier D. A study of the spectrum of skin disease occurring in a black population in south-east London. Br J Dermatol, 1999; 141: p. 512-517.