SUMMARY AND CONCLUSION
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Leprosy, a chronic infectious disease, cosmopolitan in distribution known for ages, affects most of the parts of the body including the eyes leading to blindness. Depending upon the immunity of host it can manifests in lepromatous, tuberculoid or borderline form. Ocular lesions in leprosy may result indirectly from the paralysis of V and VII cranial nerves or directly by the invasion by M. leprae. Hypersensitivity reactions or secondary infection also damage the eye.

All the changes that affects the body in leprosy can affect the eye and its adnexa, so the ocular manifestations have no mystery of their own. The disease shows same relentless chronicity in the eye, as in the other parts of body.

Estimated number of leprosy patients in the world are more than 12 million, among these 5.0-7.5 lacs have blindness. Despite major advances in recent years in the understanding of the pathology and treatment of leprosy, ocular complications still pose the greatest single threat to the patients.
Present study was undertaken to assess the prevalence of ocular lesions in leprosy patients of Bundelkhand region, its relationship with the duration and type of the disease and to find out preventative value of regular and controlled treatment of leprosy with the eye involvement.

A series of 180 patients of all ages (mean age 41.56 years) and both sexes (male 138; female 42) attending the leprosy clinic of M.I.B. Medical College Hospital, were included in this study. Patients were diagnosed by dermatology venereologist and the type was confirmed by histopathological examination. They were broadly grouped into lepromatous tuberculoid and borderline leprosy.

Details of the information of each patient was recorded on a pro set performed followed by external examination and necessary investigations. Slitlamp examination, funduscopy and tonometry of each case was done.

Out of total 180 patients, 94 belonged to lepromatous type, 34 to the borderline type and 62 to the tuberculoid type. Eye lesions were detected in 102 (56.7%) cases, most of them i.e. 72 (40.0%) were having typical leprotic eye lesions. Eye lesions were more common in
lepromatous leprosy (72.6%) followed by borderline (47.6%) and tuberculoid (40.3%).

Prevalence of ocular lesions was found more in the patients of advanced age group (about 80% in patients ≥50 years), residing in the rural community (72.14%), belonging to the low social-economic group (79.67%), suffering from disease for long duration (100% in patients with ≥14 years duration) and not taking regular treatment.

The part observed to be most commonly affected was ocular adnexa, followed by conjunctiva and cornea. No specific fundus lesions was found in any case. Vision was greatly affected, mostly in lepromatous type of leprosy.

In the light of the present work and with a view of studies done in the past, the following can be concluded.

1. Leprosy affects the persons of almost all age group, but manifests most commonly in 2nd to 6th decade.
2. Prevalence of ocular lesions is 56.7% among leprosy patients, in Bundelkhand region. However, it is only 40% due to specific leprosy lesions.
3. Ocular involvement is most common, in lepromatous leprosy (72.60%) followed by Borderline (47.60%) & least in tuberculoid type (40.30%).
4. Ocular involvement is most common in the leprosy patients of higher age group, belonging to rural community and low socio-economic group.

5. Longer the duration of disease, more frequent is ocular involvement.

6. Early initiation and regularity of systemic treatment have definite role in prevention of ocular complications of leprosy patients.

7. Most frequently an early eye lesion, is the adenral involvement in the form of, complete or partial loss of eyelashes, trichiasis and thickening of lids and supracciliary skin.

8. Leporulitheliasis, Mostly seen in tuberculoid type and borderline type, is mainly responsible for the exposure keratitis and its complications. These complications may be prevented by early institution of local treatment.

9. Though chronic conjunctivitis is frequent, it is not specific for leprosy. On the contrary, scleral nodules are infrequent, yet are characteristic feature of leprosy.

10. Corneal involvement, particularly superficial keratitis, interstitial keratitis and lepetic pannus are very characteristic features of leprosy, occurring mostly in lepromatous type of leprosy. Superficial pannus
keratitis starts from the limbus and enchroaches towards the centre of cornea, without any symptom in early stage. Interstitial keratitis though not much frequent, is one among the serious complications of leprosy, leading to blindness.

11. Chronic iritis is the most common cause of blindness in leprosy mostly occurs in lepromatous type of leprosy. This disastrous lesion produces no symptoms in early stages and can not be diagnosed by slitlamp examination. Iris pearl though not frequent, is the most pathognomonic specific feature of this disease, it is seen as a whitish nodule, projecting on the surface of iris.

12. Acute iritis is not specific and mostly occurs in rectional states of the disease.

13. Though lenticular changes are more in lepromatous type of leprosy patients yet it will be premature to conclude that leprosy leads to sutured formation. The process is accelerated in leprosy greatly because of associated iritis and partially because of biochemical and other unknown causes. The subject requires more detailed study.

14. Leprosy somehow or other, produces changes in the structures related to aqueous formation and filtration, leads to low intraocular tension. This also needs special attention for study.
Thus, ocular manifestations are common in leprosy patients. Their early diagnosis is essential to prevent irreparable damage to the eye.