



ORIGINAL RESEARCH PAPER

Ophthalmology

OCULAR MANIFESTATIONS IN PSORIASIS

KEY WORDS:

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ABSTRACT

Aim: The aim of the study is to determine the prevalence of ocular manifestations in Psoriasis patients. **Materials and methods:** A prospective study of sample size of 100 Patients(200 eyes) who are diagnosed to have psoriasis (by dermatologist) attending the dermatology and ophthalmology outpatient departments during the period of November 2017 – November 2019. Details regarding type and severity of psoriasis, time since diagnosis of psoriasis, specific ocular complaints and their duration, treatment received for psoriasis will be noted from study subjects. All the patients with psoriasis are included and the patients under PUVA therapy and serious co morbidities are excluded from the study. **Results:** The various eye manifestations of psoriasis are blepharoconjunctivitis (51%) being the most common following by episcleritis (25%) and uveitis (5%). Blepharitis is most seen in patients with scalp involvement of psoriasis. Uveitis was seen mostly in joint involved patients. **Conclusion:** Psoriasis is a chronic dermatological disease with eye as a site of extra cutaneous manifestations. It can affect almost all parts of the eye ranging from eyelids to posterior segment during disease progression. Ocular manifestations can be subtle and may be missed easily and can lead to potential sight threatening complications like uveitis which is more aggressive than of idiopathic causes. Hence early identification of these manifestations helps in treating cases early and avoiding potential blinding complications.

Introduction:

Ocular manifestations are the commonest extra cutaneous manifestations of psoriasis. Commonest eye manifestations are blepharoconjunctivitis, dry eye, episcleritis, scleritis, uveitis. Of these uveitis is the most sight threatening complication. Psoriasis affects eye either directly as the disease process or by immune mediated mechanisms. Drugs employed for treatment of psoriasis like retinoids and PUVA affect eye similarly as side effects hence excluded in the study. Signs and symptoms of ocular involvement in psoriasis can be very subtle which makes it hard to pick up early sight threatening complications, hence a comprehensive knowledge about various ocular manifestations is needed for providing comprehensive care to the patients with psoriasis.

Materials and methods:

100 psoriasis patients attending Dermatology and Ophthalmology OPD from November 2017 to may 2020 were included in the study. Examination profile included relevant systemic and ocular history, psoriasis history like duration, type, duration, visual acuity assessment, detailed slit amp examination of the eye including posterior segment. Additional tests like schrimmer's, TBUT, IOP were employed. Patients with serious co-morbidities, diabetes, hypertension, bronchial asthma and patients under PUVA treatment were excluded from the study.

Results:

Out of 100 patients in this study, patients ranged from 16 to 7 years with average age being 47.5 years, males being 59% with male to female ratio being 3:2.

Psoriasis vulgaris subtype was seen in 62% of patients. scalp involvement being commonest of 40%, nail involvement 30% and joint involvement was 6% in the study.

59% patients were asymptomatic and 41% were present with symptoms, most commonest being redness, foreign body sensation, diminished vision, pain and photophobia. There was no relation seen between duration of the disease and the symptoms. 51% patients had Blepharoconjunctivitis and was most commonly seen associated with scalp psoriasis. Blepharitis and scalp psoriasis are seen closely associated (82%). Corneal involvement was 5% and episcleritis was 2.5%.

Uveitis was seen in 3 patients of whom 2 were females with joint involvement and 1 male without joint involvement. Acute non granulomatous uveitis was seen in 2 eyes in patients (females) who had HLA-B27 positive. Chronic uveitis was seen in 1 eye of a patient without joint involvement. Vision impairment was seen probably as a complication of uveitis. 40% patients showed signs of dry eye confirmed by deranged Schirmer's and TBUT test.

Blepharitis was most commonly seen among asymptomatic patients and sight threatening uveitis (2%) was also seen which indicates the importance of complete ocular evaluation as a routine.

Discussion and Conclusion:

Psoriasis can affect any part of the eye, from anterior to posterior segment expressing its diverse nature of causing morbidity to the eye either directly or via immune mediated mechanism. Patients under PUVA treatment for the disease are to be kept under strict vigilance to detect its toxicity early. Psoriasis affects skin, joint, scalp and eyes. The exact mechanism is unknown but, Tcell mediated immune process was most postulated. Blepharoconjunctivitis being commonest followed by dry eye, corneal involvement, episcleritis, and uveitis being most sight threatening. Uveitis may present with subtle diminished vision even in asymptomatics and non joint involved patients, hence it is essential for careful evaluation to avoid complications. Blepharitis was seen mostly in patients with scalp psoriasis and hence those patients were to be evaluated thoroughly and lid hygiene should be taught promptly.

Dry eye was seen second highest irrespective of symptoms among patients, hence early identification and treatment is necessary to prevent sight threatening chronic complications like keratoconjunctivitis and ocular surface disorders.

Due to multisystem involving nature of psoriasis, a combined treatment approach involving screening and early treatment of ocular manifestations in psoriasis patients is required to reduce the ocular morbidity. Regular follow up's with dermatologist, rheumatologist and ophthalmologist is crucial for providing complete care for psoriasis patients.

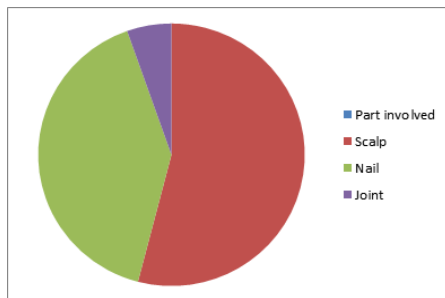
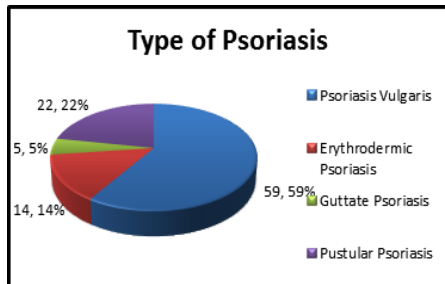
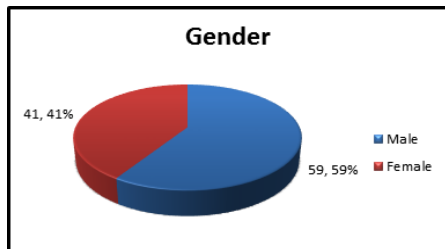


Figure :Psoriasis and the part involved.

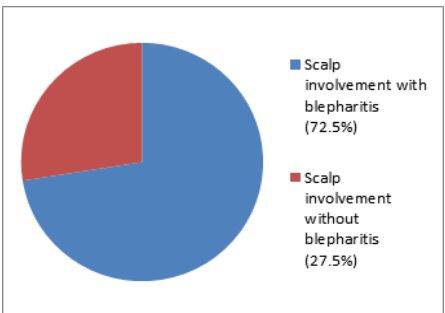
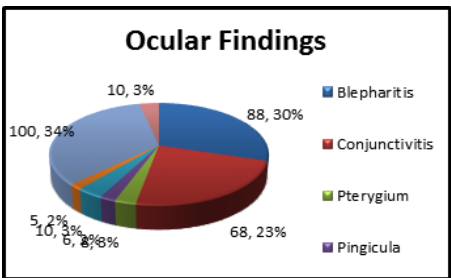
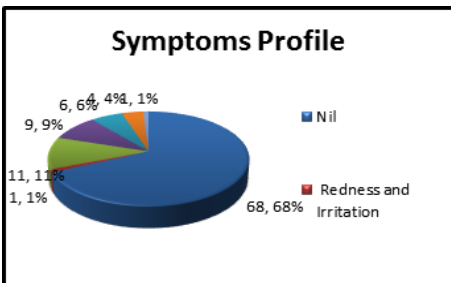


Figure: scalp involvement and blepharitis

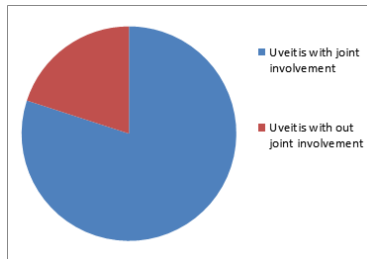


Figure :Uveitis and joint involvement in psoriasis

Table : Incidence of dry eye

Test	No of eyes
Schirmer's 1 < 10 mm	54
Schirmer's 1 > 10 mm	146
Schirmer's 2 < 5 mm	88
Schirmer's 2 > 5 mm	112
TBUT > 10 sec	35
TBUT < 10 sec	130

References:

1. Quality of life in patients with psoriasis. Monali J Bhosle, Amit Kulkarni, Steven R Feldman, and Rajesh Balkrishnan. Health Qual Life Outcomes. 2006;4:35.
2. prevalence of ocular disease in psoriatic arthritis patients in brazilian population. Lima FB, Abalem MF, Ruiz DG, Gomes Bde A, Azevedo MN, Moraes HV Jr, Yeskel AS, Kara-Junior N. s.l.: J dermatol, 2007.
3. psoriasis a clinical and some biochemical investigative study . K.C, verma. 1979, indian journal of dermatal venereal lepral, pp. 45:32-38.
4. IADVL textbook of dermatology
5. ocular psoriasis. PIERSE, PETER EUSTACE AND DERMOT. 810, s.l.: brit J ophthal , 1970, vol54
6. Shiu-chung Au, M.D., Shimrat Yaniv, B.A., Alice B. Gottlieb, M.D., Ph.D. Psoriatic Eye Manifestations.
7. kanski. clinical ophthalmology. s.l.: elsevier 2011
8. The Contribution of Meibomian Disease to Dry Eye. A. J. Bron, FRCS, F Med Sci, J.M. Tiffany, PhD. issue 2, s.l.: the ocular surface, april 2004, Vol. vol2.
9. The effects of PUVA on the eye. HA, Backman. s.l.: Am J Optom Physiol Opt., 1982 jan, Vol. 59(1).
10. Eye inflammation in psoriatic arthritis. J R Lambert, V Wright Ann. s.l.: ann of rheumatology, 1976