



## A CLINICAL STUDY ON OCULAR MANIFESTATIONS OF PSORIASIS IN A TERTIARY CARE HOSPITAL.

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**ABSTRACT** **Aim:** To assess the ocular manifestations in Psoriasis patients. **Materials and methods:** This is a clinical study conducted for 1 year, from the month of October 2021 to September 2022 in the department of Ophthalmology in association with the department of Dermatology in the Government General Hospital, Kurnool. A total number of 80 patients with psoriasis were included in this study. **Results:** Among 80 cases, 20 cases had no signs and symptoms and 60 cases had ocular symptoms of which, Conjunctival hyperemia was most commonly reported with 55% followed by blepharitis in 50%, dry eye and episcleritis in 22.5%, corneal involvement in 12.5%, uveitis in 7.5% and cataract in 2.5%. **Conclusion:** Ocular manifestations in psoriasis are common and they can affect mostly the anterior segment of eye, therefore a thorough eye examination is essential in all cases. The purpose of the study is to create awareness and simple health education towards compliance with treatment among people to prevent sight threatening complications.

**KEYWORDS :** Psoriasis, Blepharitis, Dry Eye, Episcleritis.

### INTRODUCTION

Psoriasis is a chronic, relapsing, autoimmune, inflammatory skin disorder that affects around 0.1-3% of global population. In India, the prevalence of psoriasis varies from 0.4-2.8%. Different environmental conditions (extremes of temperature), dietary habits and genetic differences are found to play a major role in its prevalence. It commonly affects skin, nails, joints and has various systemic associations including eye.

### MATERIALS AND METHODS:

#### Source Of The Data:

This is a clinical study conducted for 1 year, from the month of October 2021 to September 2022 in the department of Ophthalmology in association with the department of Dermatology in the Government General Hospital, Kurnool.

A total of 80 patients with psoriasis were included. Informed consent was obtained from each patient.

#### Inclusion Criteria:

All patients with psoriasis >18 years of age  
Patients who were diagnosed clinically by a dermatologist.

#### Exclusion Criteria:

Patients < 18 years of age.

Patients with a history of other ocular diseases and dermatological diseases and who are on ocular medications are excluded.

#### Method Of Data Collection:

A detailed history was taken and data regarding age of onset, gender, duration of psoriasis and the treatment last received (if any) was collected. Clinical types of psoriasis, site of involvement and the severity of the disease using Psoriasis area and severity index (PASI) were noted. All patients underwent a comprehensive ophthalmic examination which included measurement of visual acuity, assessment of anterior segment of eye including ocular adnexa by slit lamp bio microscopy and fundus examination. Ocular surface was evaluated by fluorescein staining. Dry eye evaluation was done by performing Schirmer's test and tear film break up time (TBUT). Schirmer's value < 10 mm and TBUT < 10seconds were taken as abnormal. Intra ocular pressure was measured using Goldman's applanation tonometer.

### RESULTS:

A total of 80 patients with psoriasis were enrolled in the study of which 50 males and 30 females. Scalp (61%) was the most common site of

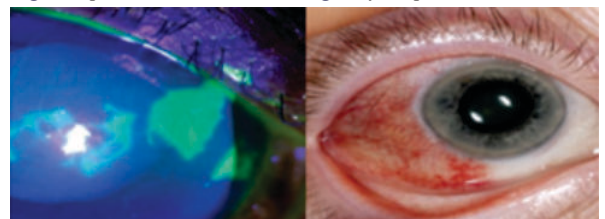
involvement, followed by the nail (46%) and joint (16%). One or more ocular signs were seen among 75% of cases in psoriasis and no signs on 25% of cases. Ocular signs seen in the study were blepharitis, conjunctival hyperemia, dry eye, corneal opacities, punctate epithelial erosions, uveitis and cataract. Blepharitis was commonly seen in patients with scalp psoriasis.

Out of 15 cases of cases of dry eye, 8 cases had Schirmer test < 10mm and 12 patients had TBUT values < 10 seconds. Among 80 cases, 20 cases had no signs and symptoms and 60 cases had ocular symptoms of which, Conjunctival hyperemia was most commonly reported with 55% followed by blepharitis in 50%, dry eye and episcleritis in 22.5%, corneal involvement in 12.5%, uveitis in 7.5% and cataract in 2.5%.



**Fig 1:** Blepharitis

**Fig 2:** Eyelid psoriasis



**Fig 3:** Corneal staining

**Fig 4:** Episcleritis

SIGNS	NO. OF CASES	PERCENTAGE
Blepharitis	40	50%
Conjunctival hyperemia	44	55%
Dry eye	18	22.5%
Corneal involvement	10	12.5%
Episcleritis	18	22.5%
Uveitis	6	7.5%
Cataract	2	2.5%
No signs	20	25%

The total is beyond 80 because of multiple signs in a single patient.

**DISCUSSION:**

Chronic nonspecific conjunctivitis is commonly associated with psoriasis. Conjunctival hyperemia (55%) was the most common ocular manifestation in psoriatic patients in the current study. Corneal involvement in psoriasis is usually secondary to dry eye disease. In the present study, we noted corneal involvement in the form of punctate epithelial erosions and superficial corneal opacities. Cataract was least common in the present study.

**CONCLUSION:**

Ocular manifestations in psoriasis are common and they can affect mostly the anterior segment of eye, therefore a thorough eye examination is essential in all cases. It should be kept in mind that ocular signs of psoriasis may progress independent of factors such as duration, type and severity of the disease. The key to prevent ocular complications is close monitoring and keep these patients under regular follow up. The purpose of the study is to create awareness and simple health education towards compliance with treatment among people to prevent sight threatening complications. Future research should be done in the community since it is difficult to generalize the study results with current research on the topic.

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**Conflict Of Interest:** None.

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