

A study of the frequency of ocular manifestations in psoriatic patients in Iraqi patients

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ABSTRACT— This paper focuses to study of the frequency of ocular manifestations in psoriatic patients in Iraqi patients where 80 patients from different hospitals in Thi-Qar, Iraq, collected. The statistical analysis program SPSS soft IBM was relied on to analyze demographic data and information about patients. The mean age of the patients was 45.2 ± 13.5 . And results were found with a statistical correlation between ocular diseases in patients, where a high percentage of Contract was found for 50 patients and 100 eyes. In addition, other abnormalities in the eye were found, including keratitis and blepharitis. Moreover, the presence of eye diseases affects the degree of disease activity and the cutaneous form of psoriasis. It can affect one or both eyes, as it generally appears with outbreaks of infections that recur over time. About half of uveitis is due to an unknown cause.

KEYWORDS: Ocular, psoriasis, HLA, CSR, GLU.

1. INTRODUCTION

Psoriasis is a chronic disease that comes through heredity, as this disease affects four percent of the world's population. Through previous studies related to this topic, a number of ocular findings or eye diseases for psoriasis were found in 7% of patients [1- 3].

Ocular psoriasis is not only a skin disease that worsens the quality of vision but also a serious cosmetic defect that causes real depression in a person [4], [5].

Regardless of where the symptoms appear, psoriasis causes not only physical discomfort but also psychological discomfort. This is especially true for women [6- 8]. The rash is very noticeable and worsens the appearance. Often this leads to depression and nervous disorders, which further provoke the disease, and psoriasis on the eyelids is often accompanied by puffiness that can be seen in some photos of the eye [9- 11].

Most often, anterior uveitis occurs in patients with joint damage. Clinical features are similar to HLA-B27-associated uveitis (non-granulomatous uveitis with thin corneal deposits). The main complaints include pain, eye redness, photophobia, and systemic manifestations, include the presence of polyarthritis (characterized by the distal phalanges of the fingers of the upper and lower extremities, as well as the sacroiliac joint) and skin lesions (psoriasis) [12- 15].

In another study, previous to data from a national survey conducted between 2003 to 2011 in Denmark, the

study included 74,129 patients with psoriasis and 13,114 patients with uveitis at the age of 18 years [16], [17].

The incidence of uveitis in the general population was 2.02 per 10,000 person-years (95% confidence interval (CI) 1.99–2.06), 2.88 per 10,000 person-year (95% CI 2.33–3.56) among those diagnosed with moderate psoriasis, 4.23 per 10,000 person-years (95% CI 2.40–7.45) with severe psoriasis, and 5.49 per 10,000 person-years (95% CI 3.36–8.96) with psoriatic arthritis [18].

Taking into account age, gender, socioeconomic status and comorbidities, the risk of developing uveitis in patients with moderate psoriasis was 38% (odds ratio (OR) 1.38; $P = 0.02$), with severe psoriasis - 40% (OR 1.4; $P = 0.34$) and 150% (OR 2.5; $P < 0.001$) in psoriatic arthritis patients [19], [20].

When analyzing data from uveitis patients, there is a 59% increased risk of moderate psoriasis (OR 1.59; $P < 0.001$), severe psoriasis - by > twice (OR 2.17; $P < 0.001$), psoriatic arthritis - by approximately 4 times (OR 3.77; $P < 0.001$).

2. Material and method

2.1 Patient sample

A survey was conducted in different hospitals in Thi-Qar, Iraq, where 80 patients were collected, and demographic information and data were collected after obtaining the ethical approvals for this study by the competent committees in the Iraqi Ministry of Health.

2.2 Study design

The patients in this study were distributed according to gender to 50 female patients and 30 males and through reliance on the statistical analysis program IBM SPSS SOFT in analyzing demographic data, in which the average age of patients ranged from 30 to 60 years.

The initial diagnosis of psoriasis was made by relying on MG for clinical reasons. In addition, an assessment was made to the extent and severity of its validity by relying on a special assessment scale.

The comorbidities were studied, the family history was recorded for patients, and patients received an examination. Complete through an ophthalmologist to know the effects present, as all patients are subjected to applanation tonometry.

As for the classifications of cataracts, they were evaluated and classified according to the degree of six and seven LOSC.

Information and demographic data related to the patient's medical history, especially the main complaint and other visual symptoms, the presence of any history of disease or eye injury that may affect vision, and the presence of any family history of eye diseases, were collected.

2.3 Study period

The study period was a full year after obtaining official approvals to collect samples and conduct the study by competent committees. The actual starting date of the study was from 1-6-2020 to 7-5-2021

2.4 Aim of study

This paper aims a study the frequency of ocular manifestations in psoriatic patients in Iraqi patients.

3. Results

P	Results patient
Age (mean± SD)	45.2±13.5
Sex	
Gender female	40 (50%)
Male (N, %)	40 (50%)
Comorbidities of 80 patients	
Diabetes N (%)	20 (25)
Hypertension N (%)	44 (55)
Ischemic heart disease N (%)	9 (11.25)
Hyperlipidemia N (%)	5 (6.25)
Stroke N (%)	2 (2.5)
FH	
YES	60 (75)
NO	20 (25)
Lattice System Physician's Global Assessment;	
Mean± sd	6.1±1.9
Symptoms eye	
redness N (%)	40 (50%)
Painful sensitivit N (%) y	50 (62.5%)
Lack of clarity N (%)	25 (31,25%)
Dry Eye N (%)	20 (25%)

Mean duration of disease (Y)	
Mean \pm SD	10.2 \pm 6.4

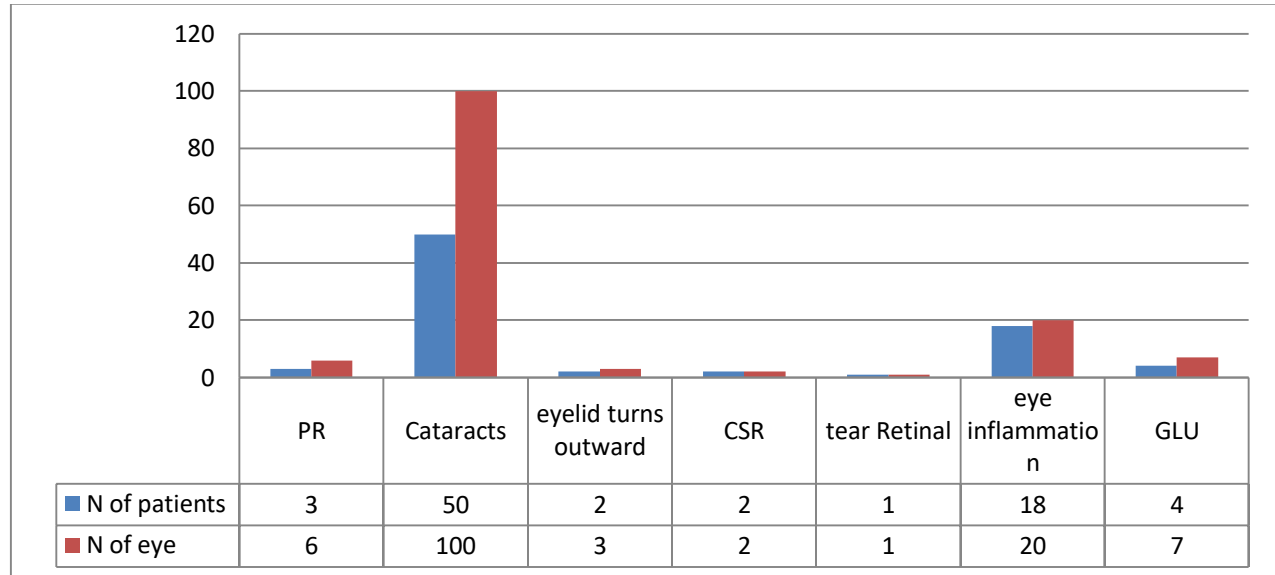


Fig 1- results of patients according to Ocular abnormalities

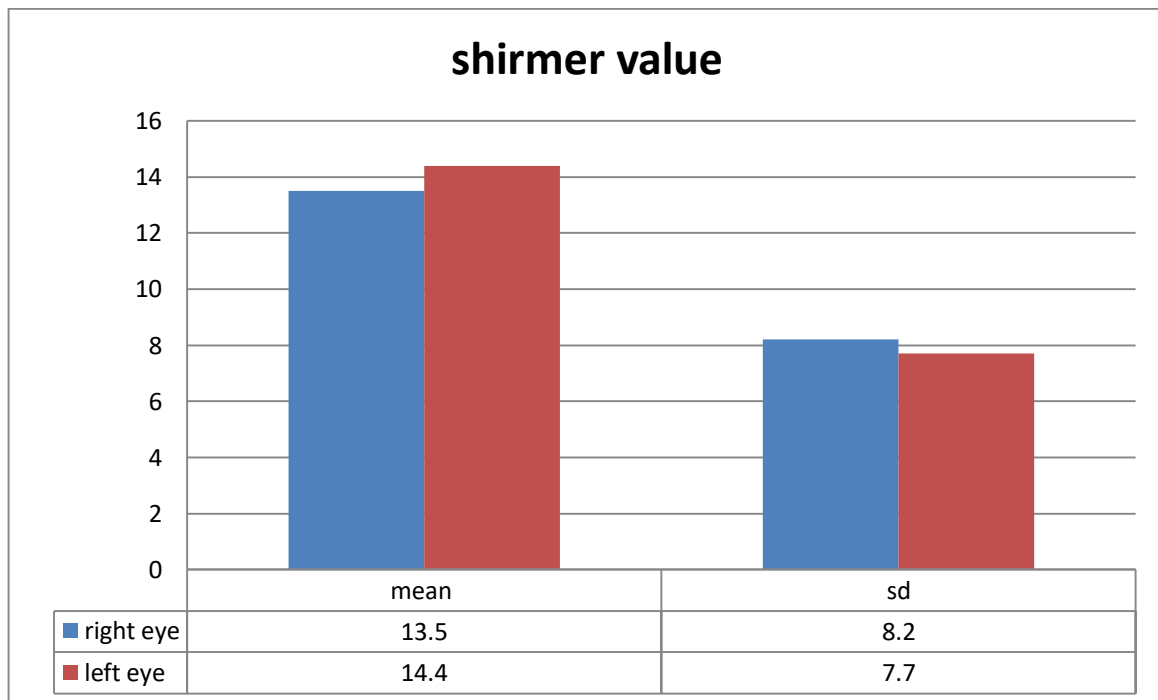


Figure 2- The mean of Schirmer values of patient

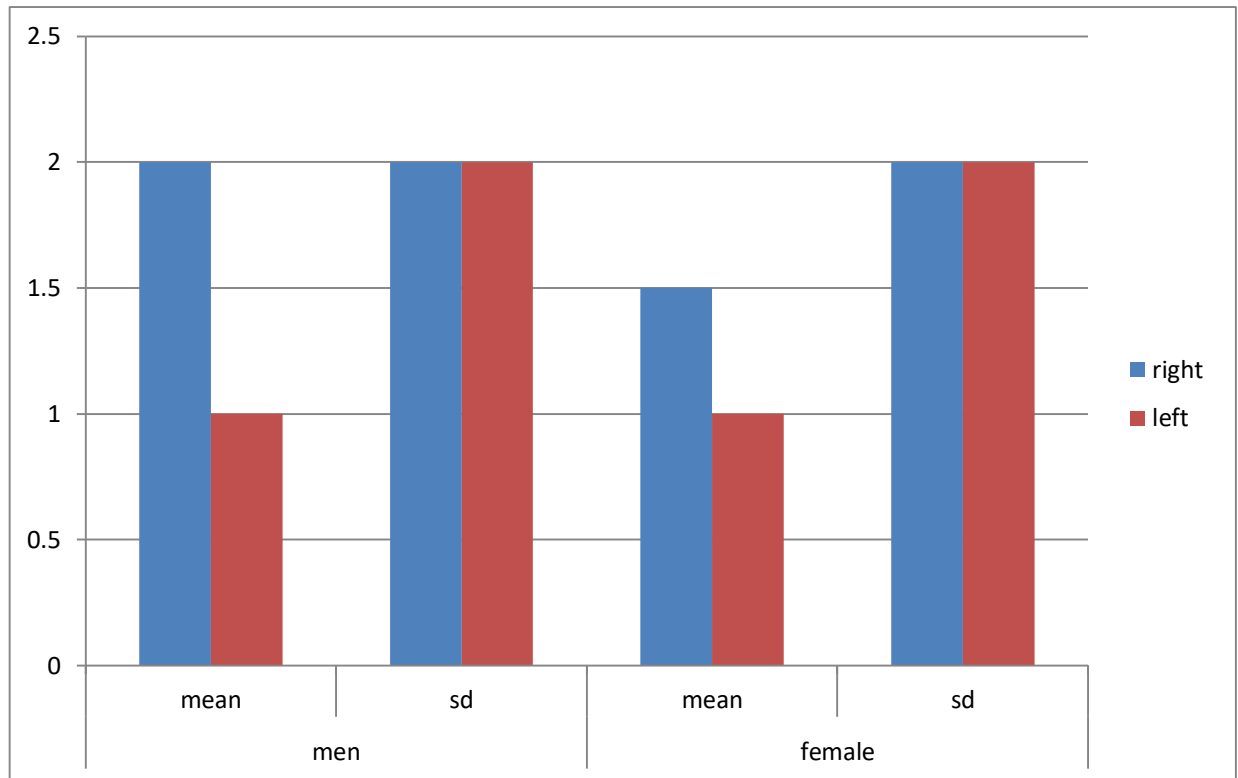


Figure 3- results of the patient according to ROSE BENGAL

4. Discussion

80 patients were collected, and through the statistical analysis program, the mean value and sd of patients were 45.2+13.5, and the proportion of females was 50%, and males were also 50% for the comorbidities, it was represented by the following proportions: diabetes 25%, pressure diseases 55%, and ischemic heart disease in 9 patients (11.25%) and 25% have a family history.

The combination of passive inflammatory arthritis and uveitis has been well studied. However, the occurrence of uveitis against the background of only psoriatic skin lesions without arthropathy is less common and little studied. However, such clinical cases have been described and are an additional confirmation of the systemic nature of the disease.

In this study, a slight relationship was found between uveitis in psoriasis patients, as 3% was found in this study, but this slight factor cannot be neglected, as it may be a major cause in the development of uveitis.

The percentage of ocular findings was observed in 50% of the patient groups, respectively (in both the right and left eye). According to the results, the prevalence of ocular findings in the patient group was statistically very high and if it is compared with the study of Sam Dr. Rider. In addition, the prevalence of blepharitis, conjunctivitis, and cornea affected in both eyes of the patient group was significantly higher than in the control group.

The mean value of the Schirmer test in both eyes in the group of patients was statistically significantly average.

Involvement of the eyelids, cornea, conjunctiva, lacrimal gland and uvea in patients with psoriasis has been reported in the literature. In addition to conjunctivitis, which is the most common problem, blepharitis,

uveitis, keratoconjunctivitis sicca, keratitis, corneal abscess, cataracts, orbital myositis, sinepeptide, Brown syndrome, trichiasis, scar ectropion, and trauma have also been reported.

Facial psoriasis is not a frequent finding; it is rare to see eyelid injury due to psoriasis. A significant relationship has not been established regarding whether the presence of eyelid lesions is a risk factor for the development of ocular lesions.

5. Conclusion

Psoriasis is a chronic inflammatory disease of unknown etiology, characterized by well-defined red scaly plaques, affecting 1-3% of the world's population. It can affect the eyes as well as the skin. Several studies and case reports have indicated that psoriasis can cause inflammatory damage to the eye.

We conclude from this study that psoriasis can be associated with cataract and ocular surface diseases, in addition to the presence of inflammation in the eyelid.

6. Recommendation

1. Topical preparations are the main treatment for psoriasis on the eyelids. The most common are weak hormonal drugs (hydrocortisone-based)
2. Non-hormonal anti-inflammatory drugs. The latter include products containing D-panthenol, zinc, urea, salicylic acid, as well as drugs from the groups of vitamins D3 analogues and calcineurin inhibitors.
3. Currently, it is impossible to completely cure ocular psoriasis. However, you can extend the remission period. Modern medicine offers a number of proven remedies that eliminate symptoms and improve the general condition of the patient. The main thing is to go to the hospital in time and not delay treatment. The earlier symptoms are detected, the more effective and faster the treatment.

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