

The pattern of psoriatic arthropathy in Mosul area

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Abstract

Psoriasis is a common disease of skin. Arthritis associated, followed or antedated skin lesions also so common. This study used to estimates patients with psoriasis who developed arthritis and to study the pattern of this type of arthritis at Mosul city, Alzahrawi teaching hospital during the period of 1st Jan. till 30th of June 2002. 115 patients with psoriasis participated in this study, 27% of them developed arthritis with mean age $\pm$ SD = 38.6 ± 15.3 , females affected more than males in ratio (1.5:1). Asymmetrical oligoarthritis is the most common type of arthritis, Lumbosacral and large joints are commonly involved, in 19% of them distal interphalangeal joint of the hand was involved. About 80.5% of patients were complaint of morning stiffness and only 10.5% developed ocular involvements in form of iritis.

Key words: Psoriasis, arthritis, the pattern of such arthritis in Mosul area.

Introduction

Psoriasis is a common skin disease, the most characteristic lesion consist of chronic, sharply demarcated, dull red scaly plaque, particularly on the extensor prominence and in the scalp (1).

The prevalence of psoriasis varies from 9.9% in Western Europe and Scandinavia (eg. Denmark) (2), to as low as 0.3% in oriental populations (eg.China) (3) and 0.1% in USA (1).

The association between psoriasis and arthritis remained controversial during the first three decades of the 20th century, this association finally gained acceptance following discovery of rheumatoid factor and series of well-controlled clinical, radiological and serological studies (4).

Similar to prevalence of psoriasis, the prevalence of psoriatic arthropathy has varied widely among hospitalised patients 6.8%...(5), the prevalence rose to 34% in Italian study involved (180) psoriatic patients...(6,7).

The aim of the study is to investigate the pattern of psoriatic arthropathy in Mosul city, while the objectives of the study are:-
1-To estimate the prevalence of psoriatic arthropathy among psoriatic patients in Mosul area.

2-To study the pattern of this disease.

3-To define the correlation between different risk factors and development of this disease.

Patients and Methods

This study was conducted as case series study during the period of 1st Jan till 30th of June 2002 at Mosul city, Alzahrawi teaching hospital. 115 patients with psoriasis were interviewed in dermatology clinic and examined together with the dermatologist, full medical history was taken from all patients, clinical examination included examination of all skin lesions (size, site, type, time of flare up, seasonal variation and clinical examination of all joints especially those affected to confirm arthritis and to exclude other types of arthritis like osteoarthritis, gouty arthritis...etc.

The following criteria were measured for diagnosis

1-Psoriasis:-skin lesion (erythematous, sharply demarcated plaque with thick silvery scales) (11).

2-Severity of psoriasis:-was estimated by measuring the surface area of involved skin by using rule of (9).(8)

Mild <10%, Moderate 10-20% , Severe >20%

3-Arthritis means joint pain with one or more of the following (swelling, redness, tenderness and limited (ROM).(7) with exclusion of other causes of acute or chronic arthritis like septic, gouty arthritis...etc

The data has been analysed by the use of statistical package SPSS ver.10 (Chicago inc. ill). First descriptive statistics were used to summarised the data and to estimate the prevalence of arthropathy, then

abivariate chi-square test was used to study the association between proportional predictor variables (age group, sex, ethnic group, religion, type, site, severity of skin lesion, nail affection) and outcome variable (arthropathy).

One way ANOVA test was used to study association of duration of psoriasis and development of arthropathy, P-value of < 0.05 was considered statistically significant.

Results

A total of 115 patients with psoriasis participated in this study, their age ranged from 2-65 years with mean age $\pm$ SD 30.7 $\pm$ 16.8, consist of 63 males (54.8%) and 52 females (45.2%). The characteristics of psoriatic arthritis are shown in table (1).

Also, the relation between onset of arthritis and onset of skin lesion are shown in table (2).

The study revealed no association between site, severity, variants and duration of skin lesions with development of arthritis, also there is no rule of ethnic, religion, residence and occupation of patients to the development of arthritis.

Discussion

In order to give value to this study, the present study should compare with other studies. The prevalence of arthritis in the present study is 27% while in American studies was found 5-7% up to 40% of hospitalized patients with extensive skin lesions (8, 10).

Also, the peak age of patients with psoriatic arthritis in this study is (30-50) years while in American studies was (30-55) years. (8,10)

Moreover, the female/male ratio in this study (1.5:1) while in other approximately female equal to male (8,10). Also, cutaneous lesion antedated arthritis in 68%, followed arthritis in 13% and synchronous with arthritis in 19% in the present study while in other study skin lesion preceded arthritis in 70%, followed arthritis in 15% and simultaneous presentation in 15%. (8,10)

Furthermore, asymmetrical oligoarthritis is the most common type of arthritis. In the present study (54.8%) which

nearly accordant to American study (30-50%) (8, 10)

Lumbosacral and large joints were the most common joints affected which is identical in both (this study and other) (8,10). While, sacroiliitis occurred in 51% of patients in present study which is higher than other study (30-50%) (8,10).

Also, distal inter phalangeal joints of the hands involved in present study in 19% of patients which is less than in other (25%) (8, 10, 15)

Ocular involvement (uveitis) occur in (10.5%) of patients, it may be asymptomatic or in early features while in American up to (30%). This may due to regular follow up and checking in highly civilian countries.

There is accordant in both studies about genetic factors which play an important role in developing psoriatic arthritis with increase chance in the first degree relatives (1, 7, 8)

This study as well as other one shows no role of skin lesion variables and extent on the development of arthritis (7).

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Table (1): Show the characteristics of psoriatic arthritis

Sample description	Value
Prevalence of arthritis	27% , number = 31 out of 115
Mean age $\pm$ SD (year)	38.6 $\pm$ 15.3
Sex distribution	Males=13(41.9%), Female=18(58.1%)
Female/Male ratio	1.5:1
Mean duration of arthritis $\pm$ SD (year)	8.8 $\pm$ 10.2
Most common type of arthritis	Asymmetrical oligoarthritis (less than 4 joints affected consisting of 54.8%)
Most common joints involved	Lumbosacral joints(80%) and large joints like knee(96%), elbow(51%), shoulder(51%)..etc
Distal interphalangeal joint of the hand involvement	Occur in 19%
Morning stiffness(> ½ hr)	Present in 80.5%
Ocular involvement	10.5% according to ophthalmologist assessment

Table (2): show the relation between onset of arthritis and onset of skin lesion

Valid	Value no.	Value %
Skin lesion preceeds arthritis	No.=21	68%
Skin lesion follows arthritis	No.=4	13%
Simultaneous presentation	No.=6	19%