©2021 ASP Ins., *Afarand Scholarly Publishing Institute, Iran*
ISSN: 7687-2645. Journal of Clinical Care and Skills. 2022;3(1):9-12.

A Survey about Psoriasis Patients in Yasuj, Iran

Journal of Clinical Care and Skills

ARTICLE INFO

Article Type
Original Research

Authors
Saeedinezhad Z.[1] *MD,*
Dabiri N.*[2] *MD*

How to cite this article
Saeedinezhad Z, Dabiri N. A Survey about Psoriasis Patients in Yasuj, Iran. Journal of Clinical Care and Skills. 2022;3(1):9-12.

[1]Department of Internal Medicine, School of Medicine, Yasuj University of Medical Sciences, Yasuj, Iran
[2]Department of Dermatology, School of Medicine, Yasuj University of Medical Sciences, Yasuj, Iran

Correspondence
Address: School of Medicine, Campus of University of Medical Sciences, Next to Imam Sajjad Hospital, Shahid Dr. Ghorban Ali Jalil St., Yasuj, Iran. Postal code: 7591994799
Phone: +98 (74) 33230290
Fax: +98 (74) 33235153
dabirin.2019@gmail.com

Article History
Received: December 26, 2021
Accepted: March 8, 2022
ePublished: May 11, 2022

ABSTRACT

Aims Psoriasis is a common immune-related skin disorder that affects 2-3% of worldwide people. This study aimed to determine the disease characteristics of psoriasis patients.
Materials & Methods In this descriptive cross-sectional study, using the convenience sampling method, 164 psoriatic patients who were referred to a dermatology clinic in Yasuj from 2013 to 2014 participated. Demographic information and medical parameters were collected by a dermatologist through observation and using a researcher-made checklist. SPSS software version 19 was used for the statistical analysis of data.
Findings Participants were consisting of 106 males and 58 females. The mean age of females was 28.72±15.89, and for males was 29.83±23.19. Most of them had the mild disease (48.3%), and common plaque-type psoriasis (87.7%). Sites of skin involvement were 80.4% on extremities. Nail involvement was 31.7% and arthritis was detected in 3% of cases. There was a history of pruritus or burning sensation in 41.5% of cases. There was only a 17.1% positive family history.
Conclusion According to the results of this study, the ratio of men with psoriasis to women was higher. Most of the skin lesions caused by this disease were observed in the extremities, head, face and trunk, respectively, and in this respect both gender were similar and few participants reported a positive family history in this regard.

Keywords Psoriasis; Injury Severity Scores; Diagnosis; History

CITATION LINKS

[1] Diagnosis and management of ... [2] Psoriasis pathogenesis and ... [3] Global epidemiology of psoriasis ... [4] Psoriasis risk factors and ... [5] Is the prevalence of psoriasis ... [6] Psoriasis prevalence in adults ... [7] National, regional, and worldwide epidemiology ... [8] Prevalence of psoriasis in korea ... [9] Epidemiology and clinical features of adult ... [10] Epidemiology of psoriasis; A population-based ... [11] Epidemiology of psoriasis over time ... [12] Presentation of early onset psoriasis in ... [13] Psoriasis [14] Epidemiological and clinical ... [15] Andrews' diseases of the skin ... [16] Clinical presentation of ... [17] A brief summary of clinical types ... [18] Reyes Servín O. Body region involvement and ... [19] The reliability of three psoriasis ... [20] Global Psoriasis ... [21] Incidence and prevalence of psoriasis in ... [22] Age at disease onset: A key factor for ... [23] Moderate to severe ... [24] Analysis of psoriasis patients registered ... [25] Nail psoriasis: The journey ... [26] Clinical dermatology: A color guide ... [27] High prevalence of psoriatic ... [28] One year survey of hospitalized psoriatic ...

Copyright© 2022, the Authors | Publishing Rights, ASPI. This open-access article is published under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License which permits Share (copy and redistribute the material in any medium or format) and Adapt (remix, transform, and build upon the material) under the Attribution-NonCommercial terms.

Introduction

Psoriasis is a common chronically recurring papulosquamous disease, showing wide variation in severity and distribution of skin lesions. It is mostly characterized by varying-sized erythematous papules and plaques covered with whitish silvery scales. It is an immune-related skin disorder with biochemical and vascular abnormalities and complex alterations in epidermal growth and differentiation [1, 2]. Genetics is an important etiologic factor and if parents and siblings are affected, there is an increased chance of developing psoriasis in one person [3]. A strong association with HLA CW6 especially in early-onset disease is existed [4]. Prevalence of psoriasis in worldwide people is 2-3% and Caucasians have reported 1.5-3% [5, 6]. There is a lower occurrence among mongoloids, American Indians, and West Africans. Psoriasis is less frequently seen in the tropics [7].

Studies on the prevalence of psoriasis in men and women have reported different results. Some have reported it to be more common in men [8-10] and some as equal [11, 12]. There are two peaks of onset: 16-22 and 57-60 [13, 14]. In some studies, the mean age of onset was 23 in Denmark, 28 in the USA, and 36 in Hong Kong [15]. Most patients experience their disease before 45 years old. There is an increasing number of patients with age because of life long nature of the disease [6, 15].

The most common clinical presentation is common plaques type (90%) [16] which is presenting with well-defined full rich red salmon pink papules and plaques, mostly symmetrically distributed on the extensor side of extremities, scalp, lumbosacral area, covering with different amounts of white scaling. The guttate form is presenting with numerous papules 2mm-1cm in diameter mostly located on the trunk and proximal extremities. In flexural or inverse type, lesions are seen mostly in flexures instead of extensors, so because of moisture, they are not scaly. In pustular psoriasis, visible pustules will be seen on erythematous lesions. There are some pustular subtypes. Erythrodermic psoriasis is extensive erythema and scaliness which covers nearly 90% of the body surface. Napkin psoriasis has been described in the napkin area of infants [17].

In one large study, the sites which were involved were: scalp 79.7elbow 77.8% legs 73.7% knees 56.6%, Arms 34.4 Trunk 52.6%, lower base of back 38%, and soles 12.9% in other study soles and palms were involved in 12% and genitalia in 2%, Nail involvement is common in nearly 40% of patients and other reports had a variation of 10-80%. Joint involvement has been reported in some patients which are related to psoriasis [18].

Yasuj is the center of Kohgiluyeh and Boyer-Ahmad Province in southwest Iran and is located in one of the mountain valleys of Zagros. People residing in this province are mostly directly nomads or the second and third generations of the nomads of this region. In addition to gaining information about the disease situation, reviewing the patients with psoriasis in this region can reveal the patient's demographic and clinical characteristics. Knowing these characteristics can help dermatologists and the care system to better manage these patients. Few studies have been conducted on the characteristics of psoriasis in Iran. The purpose of this study was to determine the disease characteristics of psoriasis patients.

Materials & Methods

In this cross-sectional study, 164 psoriasis patients were referred to a dermatology clinic in Yasuj, Iran, from 2013 to 2014 participated. Inclusion criteria were a definitive diagnosis of psoriasis and patient willingness to participate.

Medical records including personal specifications and information about the disease were compiled by a researcher-made checklist. To ensure face and content validity, the researcher-made checklist was sent to 3 subject matter experts and the necessary corrections were made. Cronbach's alpha test was done to check the reliability of the checklist (α=0.79). Body surface assessment was used to determine the severity of the disease. Patients with less than 3% of involvement with the disease were classified as mild, patients with 3-10% of involvement with the disease were classified as moderate, and patients with more than 10% of involvement were classified as severe [19]. The type of psoriasis disease was mainly determined based on clinical evidence. The parts of skin involvement were considered as the involvement of nails and joints.

Diagnosis of the disease was made by a Dermatologist (first author) in a clinical manner and the case of uncertainty about the clinical diagnosis, skin biopsy and pathology were done. Patients' history includes personal specifications such as age, the age of onset of the disease, family background, the disease characteristics, and its expansion in the body, and also symptoms of the disease such as itching, irritation, the pain in the skin and other parts such as joints were asked. The patients were examined for checking for skin lesions on different parts of the body. Nails of hands and feet, joints, and scratching signs were examined.

Data were analyzed using SPSS software version 19 by the descriptive statistic.

Findings

Of 164 patients, 106 males (64.6%), and 58 females (35.4%) were included in this study. The mean age was 35.93±22.98 years (37.36±25.83 for males and 33.5±17.64 for females). The age range was 5 to 90 years. The mean age of disease onset according to history was 29.4±0.0 years (29.83±23.19 for males and 28.72±15.89 for females). Most of the patients had mild disease and common plaque form. One of

the pustular groups had palmoplantar pustular psoriasis. The most place of disease was observed in the extremities (Table 1). The scalp involvement was less (55%). Two (1.9%) of males had penile lesions. Nail psoriatic change was seen in 52 (3.7%) of cases and arthritis or arthropathy in 5 (3%) of them. One of the patients had severe destructive arthritis. 58.6% of the females and 32% of the males complained about itching and irritation of the skin lesions.

Table 1) Results of disease in both sexes (N=164)

Variables	Male N (%)	Female N (%)	Total N (%)
Severity			
Mild	51 (48.11)	28 (48.28)	79 (48.17)
Moderate	30 (28.30)	19 (32.75)	49 (29.88)
Sever	25 (23.59)	11 (18.97)	36 (21.95)
Types			
Common	93 (87.74)	51 (87.93)	144 (87.80)
Flexural	5 (4.72)	2 (3.45)	7 (4.27)
Guttate	4 (3.77)	2 (3.45)	6 (3.66)
Pustular	2 (1.89)	3 (5.17)	5 (3.05)
Non Pustular almo plantar	2 (1.89)	0	2 (1.22)
Place			
Scalp & face	63 (59.43)	28 (48.27)	91 (55.49)
Extremities	83 (78.30)	49 (84.48)	132 (80.49)
Trunk	53 (50.00)	22 (37.93)	75 (45.73)
Palms & soles	15 (14.15)	10 (17.24)	25 (15.24)
Nail	34 (32.08)	18 (31.03)	52 (31.70)
Joints	5 (4.72)	0	5 (3.05)
Genitalia	2 (1.89)	0	2 (1.22)

Discussion

Psoriasis is a prevalent disease that lasts for life in most cases and it has many physical and mental effects for the patients and imposes a lot of costs on them and their therapeutic systems. Although few studies have been conducted on the characteristics of psoriasis in Iran, no such study has been performed in this region of Iran. In this study, some of the characteristics of this disease have been discussed.

In terms of gender, the number of male patients was more than the number of female patients. In this respect, it is in line with the study of Mohd Affandi *et al.* [9], and Fernandez Armenteros *et al.* [10] and does not agree with the results of Iskandar *et al.* [20] and Egeberg *et al.* [21] studies.

Regarding the equality of the number of patients of both genders in most of the statistics, it can be related to cultural issues regarding the women's unwillingness for referring to doctor for examining the parts of their body which are worn. In terms of age, the average age of the referring patients was 35.9 years. The age of onset of the disease seems to be like other reports [22]. Although due to the continuance of this disease for life most of the referring patients are above 40 years old in Western countries [7], the lower age of patients in this study can be due to the low age of the population pyramid in this region and also less willingness of the elderly people for continuing treatment of their disease. The age of onset of disease in this study was 29.8 for males and 28.7 for females, which is consistent with the age of onset of the disease in different societies.

In terms of severity of the disease, about 22% of the cases were severe and the remaining were moderate or mild. It is also similar to other reports from other regions. In one study 73% of patients had mild to moderate and 27% had severe disease [23].

In terms of the type of psoriasis disease, 87.8% of cases were of common type and 4.3% of cases were of in versus type, 3.7% of the cases were of the guttate type, and 3% of the cases were of pustular type. Takahashi *et al.* Conducted a study in Japan on 11,631 samples between 2002 and 2008 common plaque form was detected in 88.5%, pustular type in 2.2%, and guttate form in 3.9% [24]. These results were consistent with the results of our study. In another study, Ian *et al.* In the United States examined the prevalence of different subtypes of psoriasis in different ethnicities and races. In their study, plaque psoriasis was reported at 89- 91%, guttate 28-30%, pustular 3-9%, and inverse 6- 9% which in some cases did not agree with the results of our study, which is probably due to differences in different races and ethnicities.

In terms of the involved parts of the body, compared with a wider study was done in Sweden, in our study involvement of the head had the second level of prevalence, and involvement of the extremities had the first level of prevalence, and this result was inconsistent with the results of the mentioned study. Involvement of the trunk and palms of hands and feet indicated an expectable percentage. Two (1.9%) of males had penile lesions. In other sources range of penile lesions was from 2% to 45% [25]. Low genital involvement in this study can be related to cultural aspects of the patients' unwillingness to the examination of this part.

31.7% involvement of nails in this study is close to the average 40% statistics in other reports. Nail change was less than expected as most sources [25, 26]. Involvement of the joints (about 3%) was less than the expected level of 5-30% in other reports [26, 27].

Only 22.4% of the females and 14.2% of the males expressed a record of this disease in their family, and it can be somehow due to lack of exact information or not providing an exact family background in people of the region. In another study which was performed at Tehran University, positive family history was only 14% [28].

This study had some limitations. One limitation was the small number of samples. Perhaps if we had access to more samples, the features of the disease would have been more accurate and closer to reality. Another limitation was the lack of access to hospitalized patients due to the lack of dermatology wards in Yasuj hospitals. The findings of this study can be used in the evaluation and management of the disease mentioned by the relevant specialists in this area. Future studies with a larger number of samples and consideration of other details are suggested.

Conclusion

According to the results of this study, the ratio of men with psoriasis to women was higher. Most of the skin lesions caused by this disease were observed in the extremities, head, face, and trunk, respectively, and in this respect both gender were similar and few participants reported a positive family history in this regard.

Acknowledgments: The authors would like to thank the Vice-Chancellor for Research and Technology of Yasuj University of Medical Sciences, the staff of the Yasuj dermatology clinic and all how have assisted in conducting this research.

Ethical Permissions: There is no ethical code.

Conflicts of Interests: There was no conflict of interest.

Authors' Contributions: Saeedinezhad Z (First Author), Main Researcher/Introduction Writer/Methodologist/ Discussion Writer (40%); Dabiri N (Second Author), Main Researcher/Introduction writer/Methodologist/Statistical Analyst/ Discussion Writer (60%)

Funding/Support: The authors did not receive any financial support for this study.

References

1- Kim WB, Jerome D, Yeung J. Diagnosis and management of psoriasis. Can Fam Physician. 2017;63(4):278-85.
2- Rendon A, Schäkel K. Psoriasis pathogenesis and treatment. Int J Mol Sci. 2019;20(6):1475.
3- Parisi R, Symmons DPM, Griffiths CEM, Ashcroft DM. Global epidemiology of psoriasis: A systematic review of incidence and prevalence. J Invest Dermatol. 2013;133(2):377-85.
4- Lee EB, Wu KK, Lee MP, Bhutani T, Wu JJ. Psoriasis risk factors and triggers. Cutis. 2018;102(5S):18-20.
5- Danielsen K, Olsen AO, Wilsgaard T, Furberg AS. Is the prevalence of psoriasis increasing? A 30-year follow-up of a population-based cohort. Br J Dermatol. 2013;168(6):1303-10.
6- Armstrong AW, Mehta MD, Schupp CW, Gondo GC, Bell SJ, Griffiths CEM. Psoriasis prevalence in adults in the united states. JAMA Dermatol. 2021;157(8):940-6.
7- Parisi R, Iskandar IYK, Kontopantelis E, Augustin M, Griffiths CEM, Ashcroft DM. National, regional, and worldwide epidemiology of psoriasis: systematic analysis and modelling study. BMJ. 2020;369:m1590.
8- Lee JY, Kang S, Park JS, Jo SJ. Prevalence of psoriasis in korea: A population-based epidemiological study using the korean national health insurance database. Ann Dermatol. 2017;29(6):761-7.
9- Mohd Affandi A, Khan I, Ngah Saaya N. Epidemiology and clinical features of adult patients with psoriasis in malaysia: 10-year review from the malaysian psoriasis registry (2007–2016). Dermatol Res Pract. 2018;2018:4371471.
10- Fernández-Armenteros JM, Gómez-Arbonés X, Buti-Solé M, Betriu-Bars A, Sanmartin-Novell V, Ortega-Bravo M, et al. Epidemiology of psoriasis; A population-based study. Actas Dermo-Sifiliográficas (English Edition). 2019;110(5):385-92.
11- Goldblum OM. Epidemiology of psoriasis over time and by age and gender. Br J Dermat. 2021;184(2):e34.
12- Ejaz A, Raza N, Iftikhar N, Iftikhar A, Farooq M. Presentation of early onset psoriasis in comparison with late onset psoriasis: A clinical study from Pakistan. Indian J Dermatol Venereol Leprol. 2009;75(1):36-40.
13- Armstrong AW. Psoriasis. JAMA Dermatol. 2017;153(9):956.
14- Yildizhan IK, SÜRGÜN E. Epidemiological and clinical characteristics, treatments, and comorbidities in elderly patients with psoriasis and the evaluation of patients according to the age of onset. Turk J Geriatr. 2020;23(2):216-23.
15- James WD, Elston D, McMahon PJ. Andrews' diseases of the skin clinical atlas e-book. 1st Edition. Amsterdam: Elsevier Health Sciences; 2016.
16- Mitra AD, Mitra A. Clinical presentation of psoriasis. London, UK: IntechOpen; 2013.
17- Sarac G, Koca TT, Baglan T. A brief summary of clinical types of psoriasis. North Clin Istanb. 2016;3(1):79-82.
18- Armstrong AW, Villanueva Quintero DG, Echeverría CM, Gu Y, Karunaratne M, Reyes Servín O. Body region involvement and quality of life in psoriasis: Analysis of a randomized controlled trial of adalimumab. Am J Clin Dermatol. 2016;17(6):691-9.
19- Bożek A, Reich A. The reliability of three psoriasis assessment tools: Psoriasis area and severity index, body surface area and physician global assessment. Adv Clin Exp Med. 2017;26(5):851-6.
20- Iskandar IYK, Parisi R, Griffiths CEM, Ashcroft DM, Global Psoriasis Atlas. Systematic review examining changes over time and variation in the incidence and prevalence of psoriasis by age and gender. Br J Dermatol. 2021;184(2):243-58.
21- Egeberg A, Skov L, Gislason GH, Thyssen JP, Mallbris L. Incidence and prevalence of psoriasis in denmark. Acta Derm Venereol. 2017;97(7):808-12.
22- Queiro R, Tejón P, Alonso S, Coto P. Age at disease onset: A key factor for understanding psoriatic disease. Rheumatology. 2013;53(7):1178-85.
23- Koo JYM, Wu JJ, Gottlieb AB, Levin EC, Leon A, editors. Moderate to severe psoriasis. 4th Edition. United States: CRC Press; 2014.
24- Takahashi H, Nakamura K, Kaneko F, Nakagawa H, Iizuka H, Japanese Society for Psoriasis Research. Analysis of psoriasis patients registered with the Japanese Society for Psoriasis Research from 2002–2008. J Dermatol. 2011;38(12):1125-9.
25- Dogra A, Arora AK. Nail psoriasis: The journey so far. Indian J Dermatol. 2014;59(4):319-33.
26- Wrone DA. Clinical dermatology: A color guide to diagnosis and therapy. JAMA. 2012;307(14):1534.
27- Haroon M, Kirby B, FitzGerald O. High prevalence of psoriatic arthritis in patients with severe psoriasis with suboptimal performance of screening questionnaires. Ann Rheum Dis. 2013;72(5):736-40.
28- Farnaghi F, Moin A. One year survey of hospitalized psoriatic patients and their treatment in Razi Hospital. Tehran Univ MedJ. 1998;56(2):83-8. [Persian]