



CLINICAL CHARACTERISTICS OF PATIENTS WITH FACIAL PSORIASIS IN MALAYSIA

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INTRODUCTION

Psoriasis involving the face may cause considerable distress among patients. The face is visible and facial expressions play an important role in social interactions. Any skin conditions affecting the face, such as psoriasis may result in significant psychosocial impact among the patients. Some authors have also suggested that facial psoriasis may be a sign of severe psoriasis.



MATERIAL AND METHODS

A cross-sectional study was conducted using the data available from the Malaysian Psoriasis Registry from 2007-2011.

The Malaysian Psoriasis Registry is a systematic data collection of patients with psoriasis in Malaysia. All adult patients aged 18 years and above were included in this study.

STATISTICAL ANALYSIS

Simple logistic regression analysis was used to estimate the crude odds ratio for univariable analysis with categorical independent variables. Multiple logistic regression analysis was then carried out for multivariable analysis. *p*-values < 0.05 were considered statistically significant. All statistical analyses were done by using IBM SPSS Statistics 20 (IBM SPSS Statistics for windows, IBM Corp, Armonk, NY).

RESULTS

Among 6,181 patients, 48.4% (2,993) patients had psoriasis involving the face. The univariable analysis demonstrated that the patients with facial psoriasis tend to have a younger age of onset (≤ 40 years) and of male gender. They also have more extensive psoriasis, with BSA >10%, nail involvement and psoriatic arthritis. Compared to patients without facial involvement, patients with facial psoriasis were more likely to require phototherapy and systemic treatment. They were also noted to have poorer quality of life (mean DLQI 9.96 vs 7.07, $p < 0.001$), more days off work due to psoriasis and increased number of hospital admissions (Table 1).

Duration of disease, family history and obesity were not associated with increased risk of facial involvement in psoriasis.

After adjusting for confounding factors by multiple logistic regression analysis, six variables (age of onset, male gender, BSA >10%, nail involvement, history of hospital admission and DLQI >10) emerged as significant factors associated with facial psoriasis (Table 1).

Table 1 Factors associated with facial psoriasis (n= 6,181)

Characteristics	Without facial psoriasis (n=3188)		With facial psoriasis (n=2993)		Univariable analysis			Multivariable analysis		
	n	%	n	%	Crude OR	95% CI	<i>P</i> -value ^a	Adjusted Crude OR	Adjusted 95% CI	<i>P</i> -value ^a
Age of onset:										
≤40 years (Type 1)	1843	58.2	2070	69.9	1.67	1.50, 1.85	<0.001	1.27	1.02, 1.58	0.035
>40 years (Type 2)	1322	41.8	891	30.1	1.00	-		1.00	-	
Gender:										
Male	1726	54.1	1857	62.0	1.39	1.25, 1.53	<0.001	1.50	1.27, 1.77	<0.001
Female	1462	45.9	1136	38.0	1.00	-		1.00	-	
Obesity group:										
BMI <30	2394	75.1	2220	74.2	1.00	-	0.433	-	-	-
BMI ≥30	635	19.9	619	20.7	1.05	0.93, 1.19		-	-	-
Family history:										
Yes	628	19.7	598	20.0	1.02	0.90, 1.15	0.814	-	-	-
No	2532	79.4	2375	79.4	1.00	-		-	-	-
Duration of disease:										
≤5 years	1339	42.0	1263	42.2	1.00	-	0.783	-	-	-
>5 years	1826	57.3	1698	56.7	0.99	0.89, 1.09		-	-	-
Body surface area:										
≤10%	2100	65.9	1344	44.9	1.00	-	<0.001	1.00	-	<0.001
>10%	194	0.1	714	23.9	5.75	4.84, 6.84		5.38	4.29, 6.74	
Nail involvement:										
Yes	1806	56.6	2009	67.1	1.57	1.42, 1.75	<0.001	1.27	1.07, 1.51	0.006
No	1353	42.4	957	32.0	1.00	-		1.00	-	
Psoriatic arthritis:										
Yes	460	14.4	531	17.7	1.28	1.12, 1.47	<0.001	1.08	0.86, 1.34	0.512
No	2698	84.6	2426	81.1	1.00	-		1.00	-	
Phototherapy:										
Yes	83	2.6	169	5.6	2.27	1.73, 2.96	<0.001	1.04	0.67, 1.61	0.861
No	3005	94.3	2700	90.2	1.00	-		1.00	-	
Systemic treatment:										
Yes	1612	50.6	1600	53.5	1.14	1.03, 1.26	0.012	1.09	0.91, 1.31	0.351
No	1524	47.8	1329	44.4	1.00	-		1.00	-	
Clinic visit due to psoriasis:										
Yes	2692	84.4	2487	83.1	0.91	0.79, 1.05	0.196	-	-	-
No	421	13.2	428	14.3	1.00	-		-	-	-
Days off work/school due to psoriasis:										
Yes	221	6.9	355	11.9	1.82	1.52, 2.17	<0.001	0.99	0.74, 1.34	0.974
No	2884	90.5	2552	85.3	1.00	-		1.00	-	
Hospital admission due to psoriasis:										
Yes	35	1.1	108	3.6	3.38	2.30, 4.97	<0.001	2.66	1.32, 5.35	0.006
No	3074	96.4	2806	93.8	1.00	-		1.00	-	
DLQI score:										
≤10	1661	52.1	1140	38.1	1.00	-	<0.001	1.00	-	<0.001
>10	526	16.5	802	26.8	2.22	1.94, 2.54		1.80	1.50, 2.15	

Percentage (%) is based on total number for each group. OR = Odds ratio. CI = Confidence interval. ^a Wald test.

DISCUSSION

Most clinicians believe psoriasis rarely involves the face. This can be explained by the speculation that ambient UV radiation may be responsible or that some component of sebum has anti-psoriatic activity. However, our study showed that nearly half of our patients (48.4%) had facial involvement.

The earlier age of onset, more extensive involvement, increased requirement of systemic treatment and poorer quality of life in patients with facial involvement supports the notion that facial psoriasis is a marker of severe psoriasis.

CONCLUSION

Facial psoriasis can result in a significant psychosocial impairment and is a marker of severe psoriasis. Early recognition and appropriate treatment by dermatologist is warranted in patients with facial psoriasis.

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