

Clinical Profile, Treatment And Quality of Life (QoL) Of Adult Patients with Erythrodermic Psoriasis In Malaysia: 12 Years Review From Malaysia Psoriasis Registry (MPR)

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Introduction

Erythrodermic psoriasis (EP) is a rare but potentially life-threatening variant of psoriasis. It is characterized by prominent erythema, affecting more than 90% of the body surface area with a variable degree of scaling. This study aimed to identify the characteristics of EP patients, its management and impact on QoL over 12-year period from 2007 to 2018.

Materials and Methods

This is a cross-sectional study involving adult patients aged 17 and above with data derived from MPR (2007-2018). Descriptive data obtained from MPR such as socio-demographic details of gender, ethnicity, age of onset, marital status, aggravating factors, co-morbidities, cigarette smoking, treatment modalities & quality of life based on DLQI.

Results

- Out of 21939 patients who were notified, there were 340 patients with erythrodermic psoriasis identified during the study period. Of these, **68.8% were male** (n=234) with a male to female ratio of 2.2:1. Demographic and clinical characteristics are shown in table 1.
- Mean age of the study population was 47.4 ± 16.1 . About **80.6%** (n=274) have a **positive family history**. Nearly 200 patients have identifiable aggravating factors (58.2%). Out of these, **61.6% were due to pregnancy** while 45.5% were due to stress. This was followed by infection (30.8%), drugs (8.1%), alcohol (6.1%), trauma (5.6%), sunburn (3.0%), topical treatment and hypocalcemia at 1.0% each.
- About 77.9% of patients had nail involvement (n=265). Of these, nail pitting was the most common sign seen (71.7%, n=190), followed by onycholysis (52.1%, n=138), discoloration (43.4%, n=115), subungual hyperkeratosis (25.3%, n=67) and total nail dystrophy (12.8%, n=33). A quarter of the patients have joint involvement.
- More than half of the patients (**53.2%**) **required systemic therapy**. (Figure 1) Only 36.8% patients were on topical treatment alone while 3.8% patients had undergone phototherapy.
- About 2.6% of the patients had more than 10 clinic visits within the last 6 months. 17.6% required at least one day off work/school while **16.2% had at least one hospitalization**.
- Mean DLQI was 10.4 ± 6.7 with 56.7% had DLQI > 10.** "Leisure" was the most affected domain (23.1%), followed by "work and school" (22.4%). Unexpectedly, in 44.7% of the patients, the disease had no effect on their personal relationship. (Figure 2)

Table 1. Demographic of 340 patients with EP

Characteristics		
Mean age in years, SD		47.4 ± 16.1
Mean age of onset, SD		35.9 ± 18.0
Male: Female		2.2:1
Ethnicity, n(%)	Malay	176 (51.8%)
	Chinese	82 (24.1%)
	Others	63 (18.5%)
	Indian	17 (5.0%)
	Orang Asli	2 (0.6%)
Co-morbidities, %	Overweight/Obese	144 (42.4%)
	Hypertension	82 (24.1%)
	Dyslipidemia	52 (15.3%)
	Diabetes mellitus	41 (12.1%)
	Retroviral disease	4 (1.2%)

Figure 1. Types of systemic therapy for patients with EP

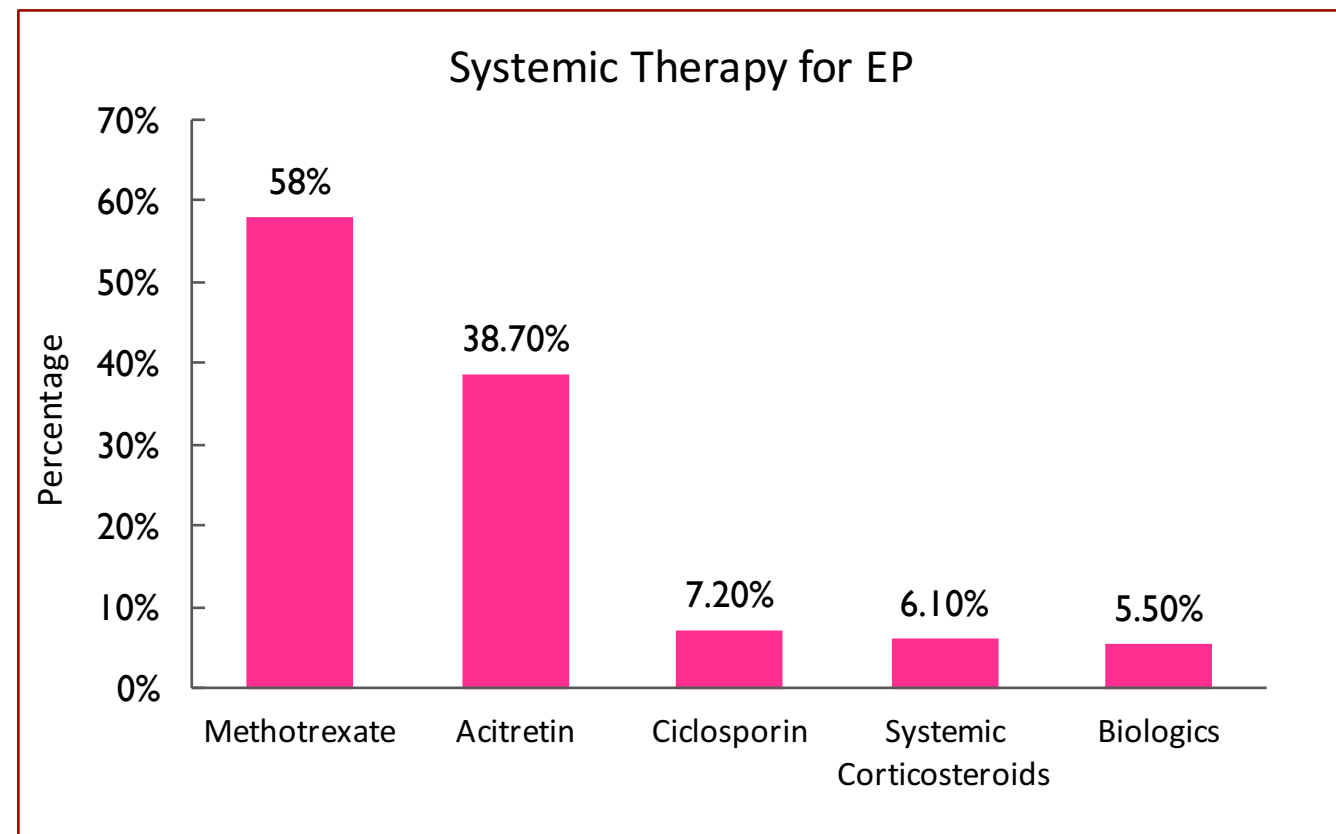
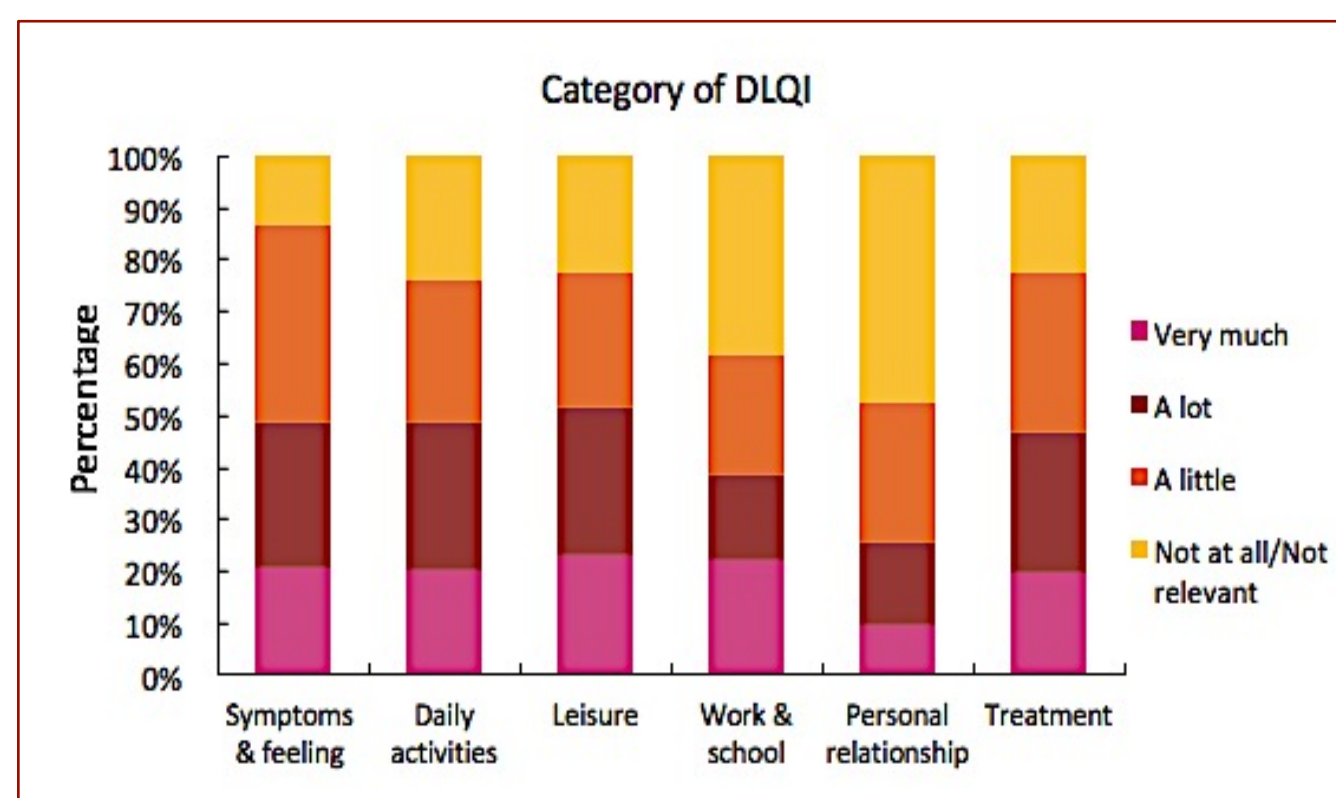


Figure 2. Degree of impairment in different domain of DLQI



Discussion

- The prevalence of EP in Malaysia is 1.5%. Yan et al reported Asians had a higher frequency of EP (OR: 5.56) compared to Caucasians.¹
- Our study showed a significant 42.4% of obesity/overweight as the commonest co-morbidity. Numerous studies have implicated a close association between obesity and EP.²
- Pregnant women had shown to be more susceptible to EP. This could be possibly due to change in medications and patients' compliance.
- In terms of treatment, systemic therapy with methotrexate and acitretin are widely used. However, many studies done internationally showed good effect with biologics. A case series by Lo Y in British Journal of Dermatology demonstrated that ixekizumab, an anti-IL-17A antibody showed rapid responses in EP cases as early as week 4.³ Egawa et al further demonstrated that EP patients' remission status was maintained for up to week 244.⁴ As for secukinumab at Week 16, 100% of the patients have achieved PASI 90.⁵
- EP patients had worse QoL compared with patients with hidradenitis suppurativa (mean DLQI at 8.9), alopecia (8.3), acne (7.5) and atopic dermatitis (5.5).⁶

Conclusion

- Majority of EP patients had positive family history, nail involvement and required systemic therapy with methotrexate being the most common treatment. EP had very large effect on QoL.

References

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