

### Prognostic factors for disease remission in early-stage mycosis fungoides: A retrospective cohort study in a Mexican population



Mycosis fungoides (MF) is the most frequent cutaneous T-cell lymphoma in 60% to 65% of all cases. The incidence reported in Mexico is 0.14% per year.<sup>1</sup> It affects generally male gender with a ratio 1.6:1 in their fifth decade.<sup>2</sup> Most patients are diagnosed in the early stage of disease. First-line treatment of early-stage disease consists of skin-directed therapies. This study aimed to determine prognostic factors for disease remission in early-stage MF.

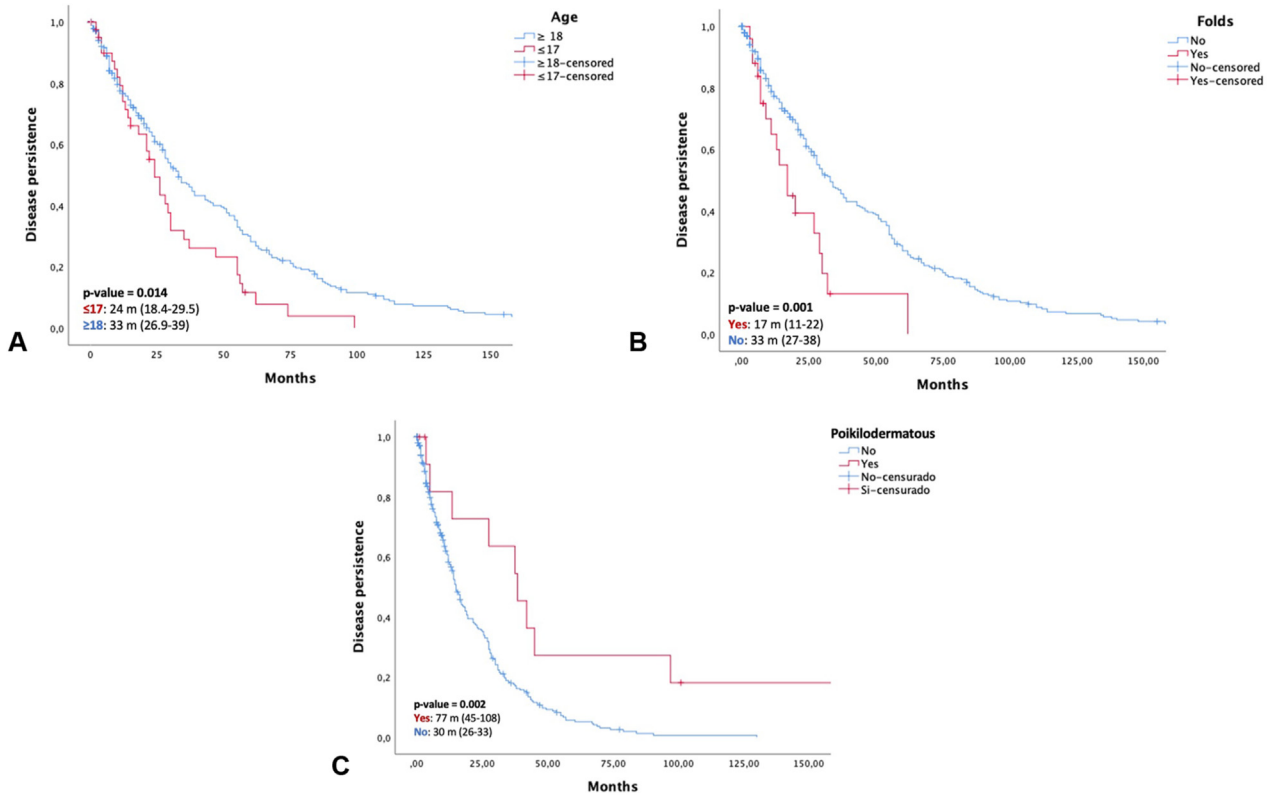
This was a retrospective cohort observational study; all clinical records of those attending “Centro Dermatológico Dr Ladislao de la Pascua” were gathered from January 2007 to 2021. Those with clinical diagnosis and histopathological confirmation were included. We calculated time to achieve disease remission with the Kaplan-Meier estimate. Multivariate analysis was performed with univariate variables for disease persistence in Cox proportional hazards.

Disease remission was defined as clinical disappearance of skin lesions and absence of previous symptoms. All analyses were performed using SPSS.

**Table I.** Baseline characteristics

|                          | Frequency (%) | Median in months (range) | <i>P</i> value  |
|--------------------------|---------------|--------------------------|-----------------|
| Age                      |               |                          |                 |
| ≤ 17 y                   | 13            | 24 (18.4-29.5)           | <b>.014</b>     |
| ≥ 18 y                   | 87            | 33 (26.9-39.0)           |                 |
| Sex                      |               |                          |                 |
| Female                   | 58            | 34 (27.5-40.4)           | .87             |
| Male                     | 42            | 28 (21.0-34.9)           |                 |
| Comorbidities            |               |                          |                 |
| Hypertension             | 14            | 30 (22.4-37.5)           | .09             |
| Diabetes mellitus        | 11            | 33 (9.9-56)              | .87             |
| Dyslipidemia             | 3             | 54 (4.16-103.8)          | .81             |
| Variant                  |               |                          |                 |
| Classic                  | 45            | 37 (31-42)               | .58             |
| Nonclassic               | 54            | 28 (25-30)               |                 |
| Hyperpigmented           | 11            |                          |                 |
| Hypopigmented            | 18            |                          |                 |
| Folliculotropic          | 3             |                          |                 |
| Intertriginous           | 8             |                          |                 |
| Single plaque            | 0.9           |                          |                 |
| Granulomatous            | 0.5           |                          |                 |
| Granulomatous slack skin | 0.2           |                          |                 |
| Syringotropic            | 0.2           |                          |                 |
| Ictyosiform              | 0.2           |                          |                 |
| Papular                  | 2             |                          |                 |
| Poquilodermatous         | 4             |                          |                 |
| Polymorphous             | 5             |                          |                 |
| Erythrodermic            | 1             |                          |                 |
| Stage                    |               |                          |                 |
| IA                       | 10.7          | 28 (20-25)               | .81             |
| IB                       | 89.3          | 31 (26-35)               |                 |
| Treatment                |               |                          |                 |
| Oral                     | 58            | 44 (33-54)               | <b>&lt;.001</b> |
| Topical                  | 42            | 20 (14-25)               |                 |

Bold indicates statistically significant results, *P* < .05.



**Fig 1.** **A**, Kaplan-Meier curve showing disease persistence according to age. **B**, Kaplan-Meier curve showing disease persistence according to presence or absence of the hyperpigmented variant located in intertriginous. **C**, Kaplan-Meier curve showing disease persistence according to presence or the absence of poikilodermatous variant. Values are represented as the median in months, with values in parenthesis from lowest to highest.

A total of 335 records met the inclusion criteria and were analyzed. Most patients (58%) were female (Table 1), and the mean age at diagnosis was 43 years (5-85). The mean time from the onset of lesions to diagnosis was 74 months (1-480). A total of 75% met disease remission. Adult population ( $\geq 18$  years) predominated (87%). Pediatric population ( $\leq 17$  years) had a faster response with a median of 24 months (18.4-29.5) as opposed to adults, 33 months (26.9-39.0)  $P = .014$ . Most patients (89%) were classified as IB stage according to tumor-node-metastasis-blood classification, with no difference for disease remission between groups IA and IB ( $P = .81$ ). Treatment was analyzed as either topical (steroids, calcineurin inhibitors, retinoids, 8-Methoxypsoralen cream, and ultraviolet A) or oral (steroids, methotrexate, retinoids, 8-Methoxypsoralen, and ultraviolet A); those in the topical group had a faster disease remission time (20 vs 44 months;  $P = .001$ ). Clinical and histological variants of MF included classical and nonclassical. Most patients (54%) presented with nonclassical clinical forms. When comparing

between groups, the poikilodermatous variant (4%) had a slower remission response (77 vs 33 months) than in non-poikilodermatous group ( $P = .02$ ). As opposed, the hyperpigmented variant located at the intertriginous area had a faster remission period with a median of 17 vs 33 months ( $P = .001$ ). Comorbidities showed no difference.

While most data on MF focus on 5-year survival rate, we assessed time in months to disease remission. Unlike what is reported in literature, most of our patients were female (58%) and nonclassical variants (54%), predominated which is an interesting fact that could be explained by ethnicity; further studies are needed. We found that gender, comorbidities, and stage were not associated with time for remission. Topical treatment had a faster time, and we associate this with less involvement and less aggressive variants. However, age ( $\leq 17$  y) and hyperpigmented variant located in intertriginous led to a shorter time for remission, as opposed to the poikilodermatous variant that had a longer time for remission (Fig 1), comparable to a recent study described in Thailand.<sup>3</sup> Relapse was present in 6.2%

of patients assessed in a period of 14 years. While we find our findings to be relevant, prospective studies are needed.

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*Funding sources: None.*

*IRB approval status: Approved.*

*Key words: cutaneous T-cell lymphoma; CTCL; disease remission; early stage; MF; mycosis fungoides; prognostic factors.*

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**Conflicts of interest**

None disclosed.

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<https://doi.org/10.1016/j.jdin.2022.06.005>