

ATOPIC MARCH AND COMORBIDITIES IN PATIENTS WITH ATOPIC DERMATITIS IN COLOMBIA

Authors: Hugo Laignelet¹, Juan Reyes², Franklin Ruiz², Natalia Castaño²

¹IPS Gastroped y Dermatosoluciones S.A.S, Bogota, Colombia. ²Pfizer S.A.S, Bogota, Colombia.

BACKGROUND

The prevalence of atopic dermatitis (AD) have increased steadily from 2 to 5% from 1960 until 2010.¹ In Colombia, a prevalence of 8-13% is reported in childhood and 11.5% in adulthood.²

Understanding the atopic march would help predict the prognosis and establish the appropriate management strategy for each patient. In addition, it is also critical to identify the comorbidities of AD patients to a better comprehension of the burden of the disease.

OBJECTIVES

To analyze the atopic march of atopic dermatitis (AD) in both children and adults and identify the risk factors associated with atopic comorbidities.

METHODS

Retrospective observational study of patients with a confirmed diagnosis of AD from a dermatology center during 2011 to 2022. Patients with a diagnosis of AD made by a dermatologist and with a minimum follow-up time of six months from the first visit, up to the last visit received at the center, were included. Data on patient characteristics, treatment, comorbidities, and relapses were analyzed. Relapse was defined as an episode requiring intensification of treatment.

Means and standard deviations (SD) were determined for continuous variables, and proportions were determined for discrete variables. Likewise, cumulative survival curves were generated to determine the time to first relapse using the Kaplan–Meier method.

RESULTS

Two-hundred-eight patients were included in this study with an average age of 25 years (SD ± 17.1) at the time of diagnosis. The mean of follow up was 1.8 (1.9) years. The onset of symptoms ranged from 15 days to 85 years, with a mean of 17.0 years (SD ± 17.2). A total of 53.3% of the patients had a family history of AD, and in 22 (10%) adult patients, a history of AD was found in childhood. Among the identified patients, 119 (57.2%) were classified as mild, 40 (19.2%) as moderate and 49 (23.5%) as severe. The sociodemographic data of the patients are presented in Table 1.

Table 1. Demographic and clinical characteristics of the patients according to AD severity

Variable	Mild (n=119)	Moderate (n=40)	Severe (n=49)	Total
Age - years (SD)	22 (16.7)	29 (19.5)	29 (14.5)	25 (17.1)
Age range (%)				
0-5	24 (20.2)	3 (7.5)	2 (4.0)	29 (13.9)
5-18	27 (22.7)	7 (17.5)	6 (12.2)	40 (19.2)
Older than 18	68 (57.1)	30 (75)	41(83.7)	139 (66.8)
Female (%)	88 (73.9)	24 (60)	22 (44.9)	134 (64.4)
Race				
Afro-Colombian	1 (0.8)	2 (5.0)	5 (10.2)	8 (3.9)
White	22 (18.5)	7 (17.5)	7 (14.3)	36 (17.3)
Mestizo	71 (59.7)	28 (70)	21 (42.9)	120 (57.7)
Other*	25 (21.0)	3 (7.5)	16 (32.7)	44 (21.2)
Education				
None	34 (28.6)	3 (7.5)	2 (4.1)	39 (18.8)
Preschool	1 (0.8)	0 (0.0)	0 (0.0)	1 (0.5)
Elementary	14 (11.8)	6 (15)	6 (12.2)	26 (12.5)
High School	28 (23.5)	9 (22.5)	12 (24.5)	49 (23.6)
Technical	5 (4.2)	2 (5.0)	4 (8.2)	11 (5.3)
College	33 (27.7)	15 (37.5)	19 (38.8)	67 (32.2)
Postgraduate	4 (3.4)	5 (12.5)	6 (12.2)	15 (7.2)
Family background of AD	57 (47.9)	27 (67.5)	27 (55.1)	111 (53.4)
Employee status	42 (35.3)	19 (47.5)	30 (61.2)	91 (43.8)
Time symptoms to diagnosis of AD (months)	81 (117.0)	93 (99.2)	131 (120.0)	95 (116.0)

* Corresponding to patients with skin type IV or V

• Skin lesions

The most frequently affected body areas were facial (120 cases), followed by folds in the extremities (111 cases). Sixty-six percent of the patients had 2 or more body areas affected. In 35 patients, generalized lesions were reported, being more frequent in patients with severe dermatitis.

• Comorbidities

Regarding the frequency of allergic diseases, 170 (81.7%) patients reported at least one comorbidity. Among these, 55.3% reported allergic rhinitis, 22.1% asthma, and 13.5% both diagnoses at the time of data collection, prevailing over the other categories analyzed.

Table 2. Comorbidities of patients according to severity

	Mild (n=119)	Moderate (n=40)	Severe (n=49)	Total
Allergic rhinitis	59	23	33	115
Asthma	25	5	16	46
Allergic contact dermatitis	19	10	9	38
Food allergy	9	3	9	21
Drug allergy	3	1	2	6
Urticaria	1	1	2	4
Alopecia areata	2	1	0	3
Obesity	1	0	2	3
Depression	0	0	2	2
Hidradenitis suppurativa	2	0	0	2
Morphea	1	0	1	2
Acne	1	0	0	1
Animal allergy	1	0	0	1
Insect sting allergy	1	0	0	1
Rheumatoid arthritis	0	0	1	1
Dermatomyositis	0	0	1	1
Eosinophilic esophagitis	1	0	0	1
Hypothyroidism	0	0	1	1
Mycosis fungoides	0	1	0	1
Prurigo stromalis	1	0	0	1
Psoriasis	0	0	1	1
Thyroiditis	1	0	0	1
Vitiligo	1	0	0	1

*Three patients with allergic rhinitis, 3 patients with asthma and 1 patient with food allergy did not report severity of atopic dermatitis.

• Therapeutic route

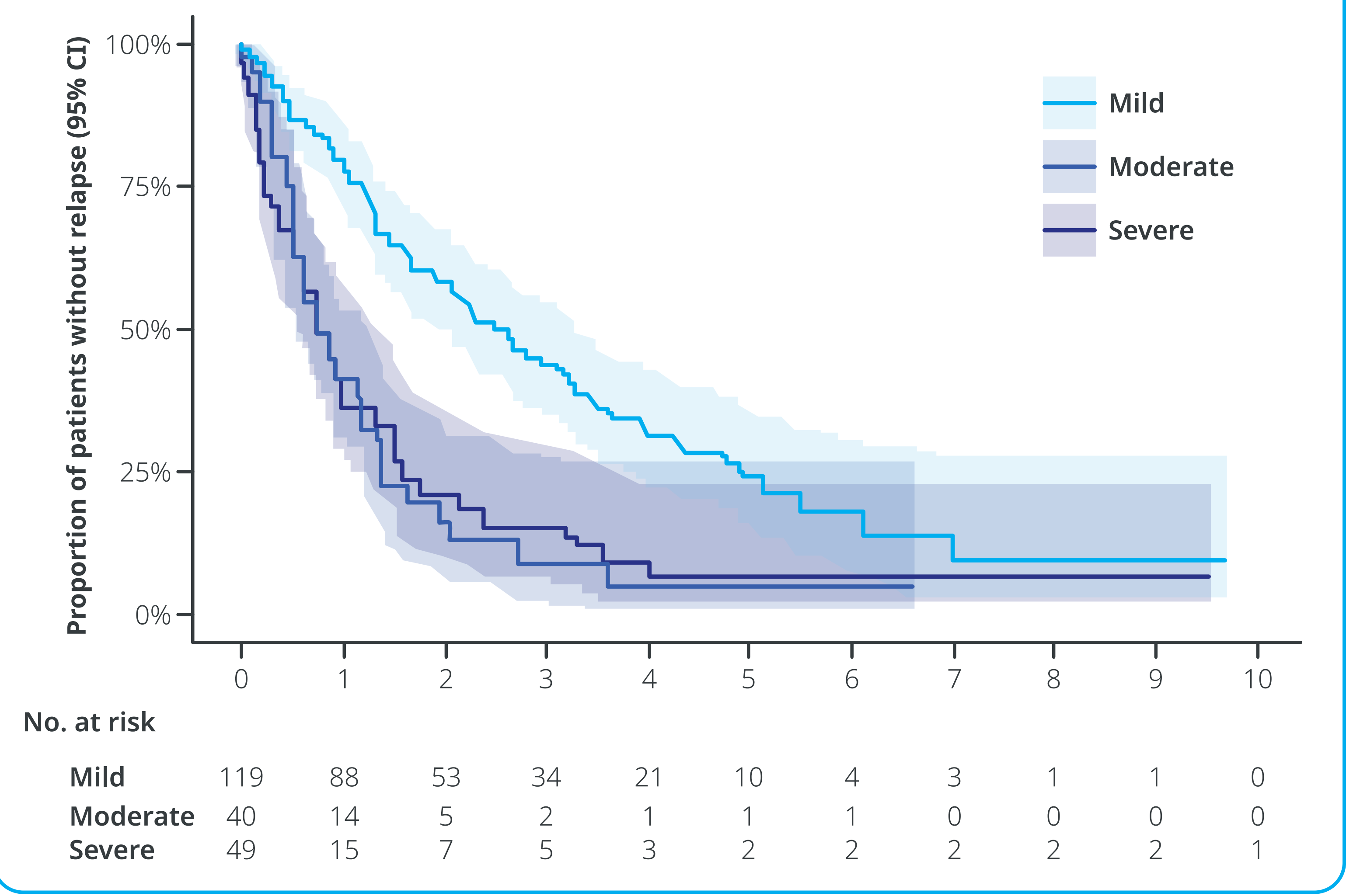
One hundred fifty patients (72.1%) were prescribed with 2 or more type of treatments throughout the follow up. Most of the patients (93.2%) had applied topical corticosteroids in the past, and 63% had used topical calcineurin inhibitors as a sole treatment for mild atopic dermatitis or as adjunct in moderate to severe cases. Almost a quarter (23%) of the patients required treatment with oral corticosteroids at some point; 13.9% of the patients used conventional systemic treatments, especially those with severe atopic dermatitis; 6.7% used dupilumab.

• Relapses

A total of 75.9% of the patients relapsed during the study period. In patients with mild atopic dermatitis, a relapse was frequently observed; however, in moderate and severe cases, this number increased to more than 3 relapses

in 5% of moderate cases and in 9% of severe cases. The analysis of the time until the first relapse, showed that the mean time to relapse for patients was 1.57 (95% CI 1.30-2.25) years. Specifically, the time to first relapse was longer in patients with mild dermatitis (2.48 95% CI 1.94-3.29) than in patients with moderate (0.72 95% CI 0.55-1.34) and severe (0.81 95% CI 0.57-1.51). However, an overlap of the curves is observed between patients with moderate and severe dermatitis.

Figure 1. Kaplan–Meier time to first relapse due to severity of dermatitis



CONCLUSION

Results showed the heterogeneous nature of the AD and high variability of treatment trajectories. The main comorbidities associated were allergic rhinitis and asthma. The relapses in these patients showed a relevant trend mainly in patients with moderate and severe dermatitis.

REFERENCES

1. Del-Cas PG, Acuña MK, Dei-Cas I. Dermatitis atópica en niños: estudio comparativo en dos grupos etarios. Revista Chilena de Pediatría, 82(5), 410-418.

2. Hernandez N, Laignelet H, Sanchez JR, et al. POSA200 Characterization of Atopic Dermatitis Patients Treated in Colombia. Value in Health. 2022; 25(1):S126.