

Treatment patterns in the management of alopecia areata in a Colombian HMO during 2015-2023: a Real-World Data study

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OBJECTIVE

- To identify treatment patterns in the management of alopecia areata (AA) in a Colombian Health Maintenance Organization (HMO) between 2015 and 2023.

METHODS

- A retrospective, descriptive cohort study of AA patients from 2015 to 2023 was conducted. Patients with the ICD-10 code L63.0 – L63.9 were included.
- The index date was defined as the date of the AA diagnosis, and patients were followed until death, insurance discontinuation, 5-year follow-up, or December 31, 2023, whichever happened first.
- Demographics, treatment, and medical care were assessed at the index and during follow-up. Data were extracted from HMO administrative health records.
- Disease severity was generated for patients with pharmacological management, where systemic treatments denoted moderate to severe cases while classified as mild were topical treatments that can be used at any stage of the disease.
- Kaplan-Meier survival analysis was conducted to determine treatment persistence.

RESULTS

- The study included a total of 62,516 patients (12.75% were alopecia universalis and 3.7% alopecia totalis). Approximately 45.1% of these patients were identified during the post-COVID pandemic period (2021-2023). A higher proportion of these patients were women (67.7%), with a median age of 31.2 years (IQR 17.6) (Table 1).

Table 1. Demographic characteristics of patients with AA

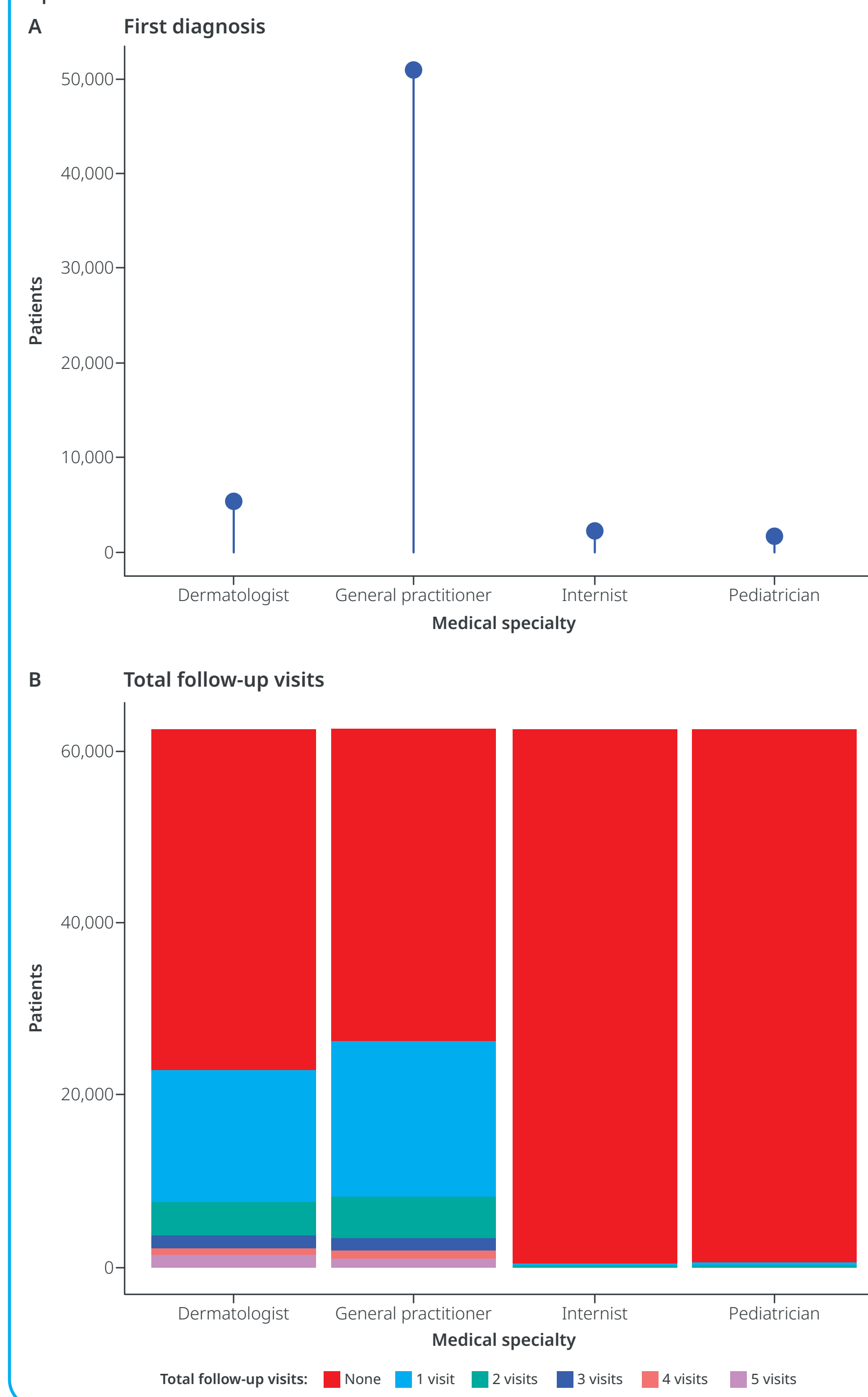
Demographics		AA [n = 62516]	
Age at diagnosis			
Median (IQR)		31.18 (17.57)	
Age group at diagnosis		n	%
0-17		8,195	13.11
18-44		41,168	65.85
45-65		11,333	18.13
>65 years		1,820	2.91
Sex		11,333	18.13
Female		42,342	67.73
Male		20,174	32.27
Type of AA [ICD-10]			
AA, unspecified [L63.9]		41,332	66.11
Other AA [L63.8]		25,288	40.45
Alopecia universalis [L63.1]		7,971	12.75
Alopecia (capitis) totalis [L63.0]		2,316	3.7
Ophiasis [L63.2]		15	0.02

RESULTS (cont)

Year of diagnosis		
2015	4,400	7.04
2016	4,740	7.58
2017	5,413	8.66
2018	6,708	10.73
2019	7,231	11.57
2020	5,850	9.36
2021	9,077	14.52
2022	9,375	15.00
2023	9,722	15.55

- Most patients received their first AA diagnosis from a general practitioner [GP] (n= 50,928, 81.5%), with only 8.6% (n=5,399) diagnosed by a dermatologist. Follow-up visits during the study period were mainly by a GP (n=26,231, 42.0%) compared to dermatologist (36.6%), however 1,237 patients (2.0%) consulted 5 or more times to the dermatologist during this period, while only 908 patients (1.5%) received 5 or more GP visits (Figure 1). The median number of consultations with any of the medical specialties was 1.

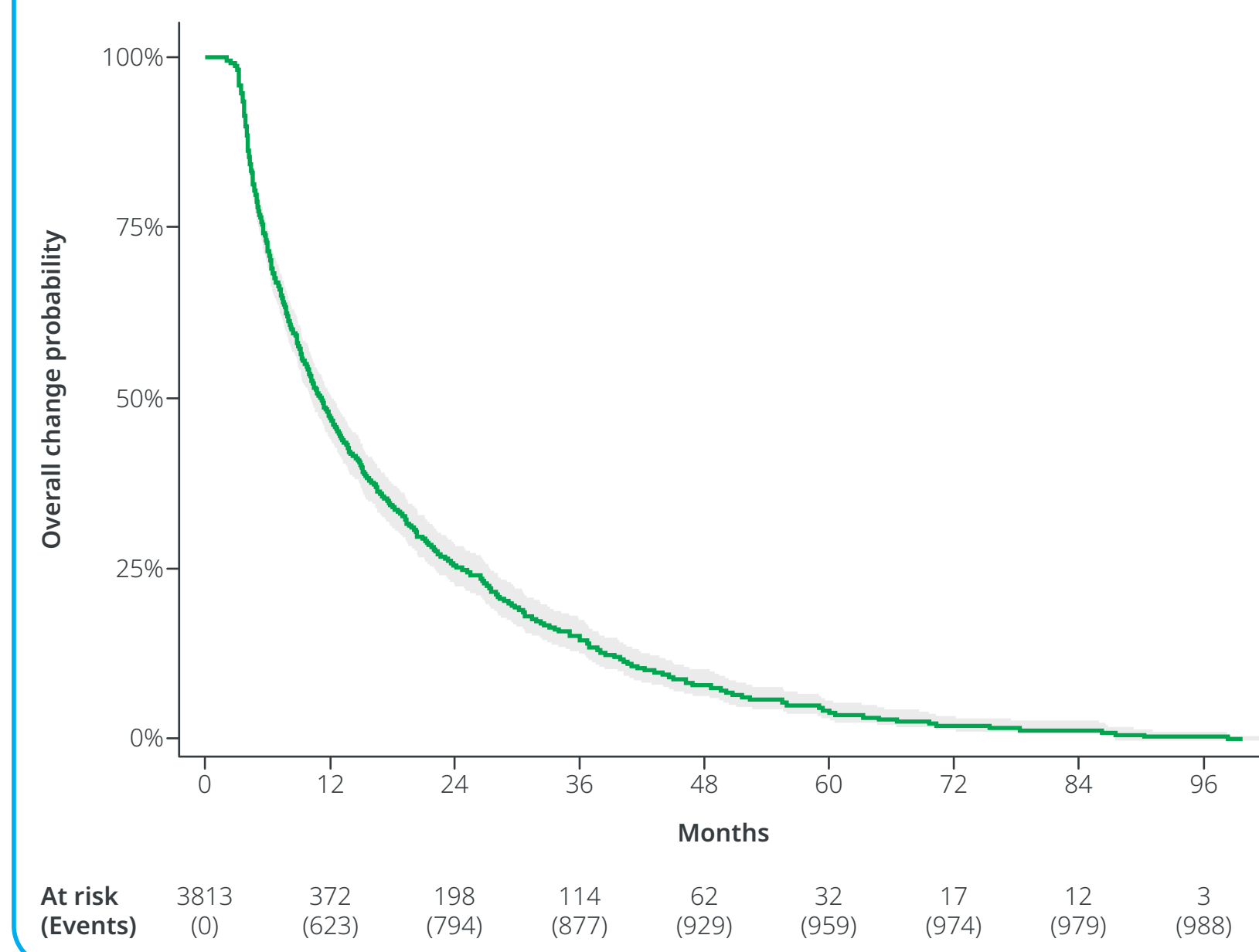
Figure 1. Diagnosis (A) and follow-up consultations (B) by medical specialties



RESULTS (cont)

- Most frequent laboratories administered at least once during the study period were related to complete blood count (17,984 patients, 28.8%), iron and ferritin level (15,792 patients, 25.3%) and blood glucose test (10,155 patients, 16.2%). No records related to procedures such as phototherapy were observed.
- Only 11,536 patients (18.4%) received pharmacological treatment, most patients didn't receive more than one drug. From 13,813 pharmacological claims, most of these denoted mild disease (81.6%) and 18.4% as moderate to severe. Topical betamethasone (38.4%), hydrocortisone (36.4%) and injectable betamethasone (5.1%) were the most common strategies.
- In addition, the median duration of any of the treatment received was 11 months (Figure 2). Patients diagnosed with alopecia universalis presented the highest median treatment duration (19 months), followed by those with alopecia capitis totalis (14 months), while patients with unspecified or other AA presented a median of 11 months each.

Figure 2. Overall treatment persistence.



- By disease severity, mild disease patients presented a median duration of 12 months while moderate to severe 9.7 months. Clobetasol, topical betamethasone, prednisolone and azathioprine presented the longest median duration with 15, 14, 13 and 13 months, respectively.
- By age group the median duration was higher at the tails, those over 65 years presented a median of 17 months and those under 18 years old of 12 months (Table 2).

Table 2. Treatment persistence by age group

Characteristic	N	Event N	Median	p-value ¹
Age group				
0-17 years			12, (9.3, 15)	
18-44 years			11, (9.4, 12)	
45-65 years			11, (9.3, 15)	
>65 years			17, (9.8, 56)	
¹ Log-rank test				

- Those treated after the COVID-19 pandemic had a lower median than those treated before the pandemic, the median treatment duration oscillated between 9.2 and 15 months at the pre-pandemic period while during 2021 and 2022 it did not exceed the 8.1 months (Table 3).

RESULTS (cont)

Table 3. Treatment persistence by year of diagnosis

Characteristic	N	Event N	Median	p-value ¹
Year of diagnosis				
2015			15, (13, 20)	
2016			9.2, (7.9, 15)	
2017			12, (8.9, 15)	
2018			11, (9.8, 15)	
2019			15, (12, 22)	
2020			11, (10, 15)	
2021			8.1, (6.7, 11)	
2022			7.1, (6.0, 9.8)	
2023			5.5, (4.9, 38)	
¹ Log-rank test				

CONCLUSION

- The observed AA patients were mostly female middle-aged adults who have been mainly diagnosed and followed by a GP.
- Healthcare resource use was conservative, less than 30% of patients used laboratories and less than 20% of patients were given pharmacological treatment. The median number of visits was concentrated on one visit, regardless of specialty.
- The management of the patients studied was dominated by topical corticosteroids. The most frequent treatment was topical betamethasone, and the most persistent treatment was clobetasol.
- Substantial decreases in the median treatment duration were observed in the post-pandemic periods.

DISCUSSION

- A study conducted in South Korea severe AA patients (n=151)¹ showed that aligned with our results, most patients have been treated with topical corticosteroids. In addition, that study found that the median duration of treatment for first and second line were 12.6 and 11.9 months. Our findings indicate that overall median treatment duration is around 11 months.
- A network meta-analysis study suggest the approved therapies during the study period in Colombia for AA have an uncertain impact on hair regrowth². In our study about 74% of claims were related to topical corticosteroids (mainly bethametason and hydrocortisone).
- This study presents different limitations, for example, details on disease severity derived from pharmacological treatment and not clinical measurements (e.g. symptoms, signs, scales, etc.), therefore the distribution of patients by severity might differ. In addition, this study does not capture over-the-counter medicines that might change the observed treatment patterns. Our results indicate that more than 80% of the patients weren't prescribed any pharmacological treatment.

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