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**Author/s:**

Trindade de Carvalho, L;Jerjen, R;Meah, N;Wall, D;Sinclair, R

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Duration of remission after recovery from the first episode of alopecia areata

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**Name of authors:** Lara Trindade de Carvalho MD<sup>1</sup>, Rebekka Jerjen BMSc (Hons) MChD (Dist)<sup>1</sup>, Nekma Meah MBChB MRCP<sup>1</sup>, Dmitri Wall MBBCh, BAO, MRCP<sup>1</sup>, Rodney Sinclair MBBS, MD, FACD<sup>1,2</sup>.

**Names of the institutions of authors:**

<sup>1</sup> Sinclair Dermatology. 2 Wellington Parade, East Melbourne, Victoria, Melbourne, 3141

<sup>2</sup> University of Melbourne, Parkville, Victoria, Australia

**Corresponding author:** Lara Trindade de Carvalho, MD

Sinclair Dermatology, Victoria, Australia

2 Wellington Parade, East Melbourne, Victoria, Australia

Email: lara.carvalho@sinclairdermatology.com.au

Telephone: +61 (03) 9654 2426

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DR. LARA TRINDADE CARVALHO (Orcid ID : 0000-0001-8540-0983)

DR. REBEKKA JERJEN (Orcid ID : 0000-0002-7749-1069)

PROF. RODNEY SINCLAIR (Orcid ID : 0000-0001-6751-1428)

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Dear editor,

Alopecia areata is an autoimmune disorder characterized by patches of hair loss that appear suddenly, most often on the scalp. Early age of disease onset, positive family history, atopic disease and nail changes have all been described as indicators of poor prognosis in alopecia areata (AA)<sup>1,2</sup>. However, there is a paucity of information on the outcome of the first episode of AA and the duration of any subsequent remission. This study aimed to identify the duration of remission in patients who achieved complete remission after their first episode of AA. This information would be valuable when counselling patients on initial presentation.

We retrospectively reviewed the records of patients who presented to a specialist Australian hair clinic with their first episode of AA between September 2016 and January 2020. The diagnosis was based on typical clinical feature and made by dermatologists with expertise in hair disorders. Patients with sufficient clinical information were included in the study with a pre-defined limit of 100 patients. Remission duration was defined as the period of stable disease (in months/years) with no apparent development of alopecic patches after achieving complete regrowth following first episode of AA (as reported by the patient). Statistical analysis was done using SPSS software.

Of the 100 patients, the majority (78%) were female, the mean age was 34 years (range 9 to 77 years) and the majority (62%) developed AA under the age of 40 (3%, 21%,

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19%, 19% in the first, second, third and fourth decade respectively). The phenotypes of the first AA episode included patchy (86%), diffuse (6%), ophiasis (2%), patchy-beard (1%), alopecia totalis (AT; 4%) and alopecia universalis (AU; 1%). Eighty-two percent of patients achieved complete hair regrowth within 12 months and all patients achieved regrowth within five years. Eighty patients (80%) experienced relapse, whilst 20 (20%) patients remain in remission at the time of publication. Among the 80 relapse patients, 33 (41.3%) had a remission duration <12 months, 36 (45%) had a remission duration between 1 and 5 years, five patients (6.25%) reported remission duration between 5 and 10 years whilst six patients remained in remission (7.5%) >10 years (see table 1).

No statistically significant association between remission duration and gender ( $p=0.98$ ), alopecia phenotype ( $p=0.44$ ), treatment received ( $p=0.06$ ), episode duration ( $p=0.26$ ) or age at first episode ( $p=0.22$ ) was found. The majority of all patients (80%) received treatment for their first AA episode (figure 1). Sixty-five patients were treated with multiple agents.

Consistent with existing literature, our findings confirm that the first episode of AA typically occurs before the age of 40 and with a patchy phenotype<sup>3</sup>. Remission duration after the first episode of AA was less than 2 years for the majority of patients. Forty-one percent of patients who relapse, do so within 12 months. Eleven percent relapse after 5 years of remission. We observed a higher rate of regrowth within 12 months (78%) compared with those reported by Ikeda in her study populations (67%), however her group was largely untreated<sup>1</sup>.

The retrospective nature of this study introduces recall and documentation bias risk as a possible limitation. No statistically significant correlation was found between any of the demographic, phenotypic or therapeutic factors with remission duration. This may be due to insufficient power of the study to detect a small effect or due to a lack of true relationship. Further studies are required to investigate this.

Legend:

Figure 1: Treatment modalities for the first episode of Alopecia areata (AA).

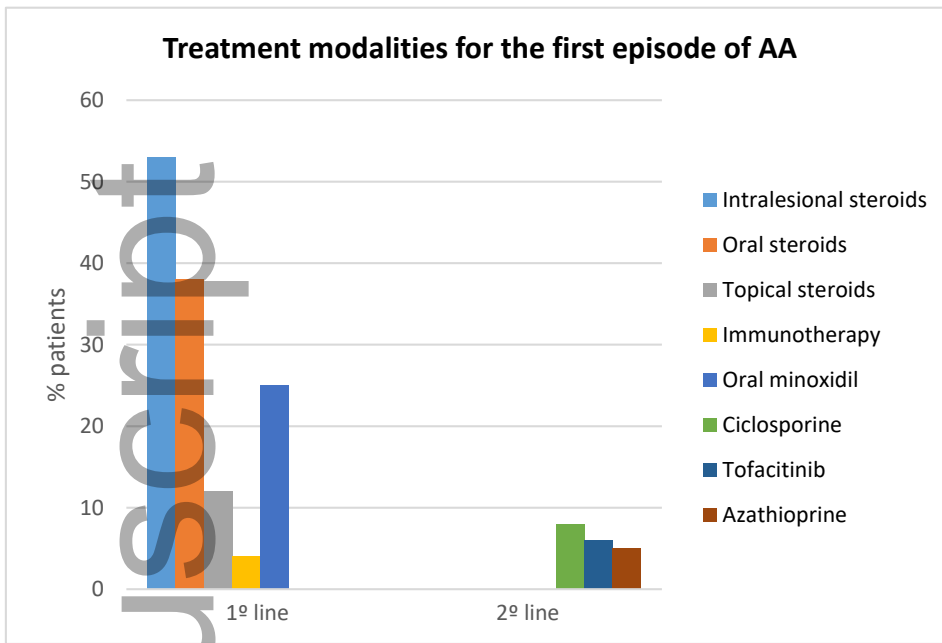
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Remission duration after recovery of the first episode of AA	Number of patients
<6 months	22
6-12 months	11
1-2 years	18
2-5 years	18
5-10 years	5
10-15 years	3
15-20 years	2
>20 years	1
<b>Total</b>	<b>80</b>

**Table 1:** Remission duration after recovery of the first episode of AA.



**Figure 1:** Treatment modalities for the first episode of Alopecia areata (AA).

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