



## THE CLINICAL SPECTRUM OF ALOPECIA AREATA IN IRAQ

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### ABSTRACT

**Background:** Alopecia areata typically presents with round patches of hair loss. Patches may be single or multiple, and may coalesce. Although most obvious on the scalp, any hair-bearing skin can be affected. **Aim of the study:** This study was carried out in an attempt to have an idea about the alopecia areata regarding to age, sex distribution, relation to atopic dermatitis and clinical pattern of the disease. **Materials and Methods:** A total number of two hundred fifty patients of both sexes with various degree of severity of alopecia areata. The patients were collected from multiple private dermatological clinics from January 2018 to July 2018. **Results:** 155 patients (62%) were males, and 95 patients (38%) were females, most age group is between 21years—30 years(28.8%) followed by age group 31years—40years(19.2%), 80.8% (202 patients) had more than one lesion. Most common site involved is the scalp 45%. Autoimmune disorders that was found in 32 patient's (12.8%).

**KEYWORDS:** Alopecia Areata, Autoimmune diseases.

### INTRODUCTION

Alopecia areata (AA) is a common chronic inflammatory disorder of the hair<sup>[1]</sup>, characterized by discrete, well-demarcated areas of non-scarring terminal hair loss.<sup>[2]</sup> At any given time, approximately 0.2% of the population has AA.<sup>[3]</sup> AA may occur on any hair-bearing region.<sup>[4]</sup> Although alopecia is commonly seen on the scalp, it may occur only on other body sites or on several different sites.<sup>[5]</sup> Alopecia totalis (AT) refers to the total absence of terminal scalp hair while alopecia universalis (AU) refer to the total loss of terminal body and scalp hair. Ophiasis refers to a band like pattern of hair loss over the periphery of the scalp.

Hair loss may also be diffused, mimicking anagen effluvium.<sup>[6]</sup> Characteristic hairs, known as "exclamation point hairs," may be seen within or around the areas of alopecia. The hairs are tapered toward the scalp end with thickening at the distal end.<sup>[7]</sup> Some patients may first present with nail abnormalities such as pitting, thinning nail plates, and nail ridging.<sup>[4]</sup> Histological examination shows a peribulbar lymphocytic infiltrate resembles a "swarm of bees" scarring is characteristically absent.<sup>[8]</sup> A family history positive for AA in more than one member can be obtained in at least 20% of patients.<sup>[9]</sup> There is an increased incidence of autoimmune disease in patients with AA, particularly vitiligo and thyroid related diseases, namely Hashimoto's thyroiditis and Graves' disease, and there is higher prevalence of pigmentary

defect in patient with AA.<sup>[10]</sup> Several studies have reported an association between AA and atopic disease and have suggested that AA in atopic subjects have an earlier age of onset and is more severe than in non-atopic subject. Emotional Stress seems to play an important role in the onset and aggravation of alopecia areate.<sup>[11]</sup> No cure or preventive treatment for AA has been established, thus treatments are directed toward halting disease activity.<sup>[12]</sup> Many medications have been used in its treatment including topical, intralesional and systemic corticosteroids<sup>[13,14,15]</sup>, topical irritants<sup>[16]</sup>, topical minoxidil<sup>[17]</sup>, PUVA<sup>[18]</sup> and others.

### AIM OF STUDY

This study was carried out in an attempt to have an idea about the alopecia areata regarding to age, sex distribution, relation to atopic dermatitis and clinical pattern of the disease.

### MATERIALS AND METHODS

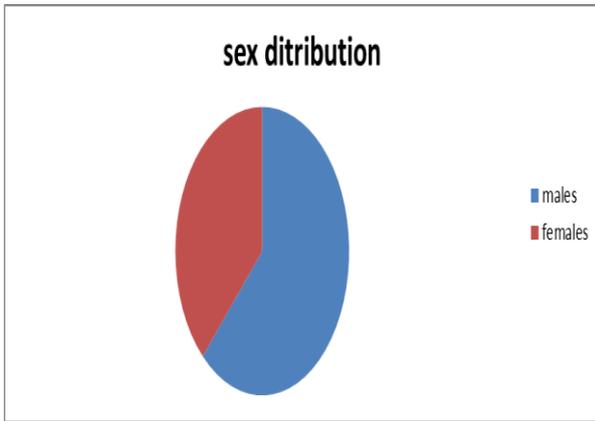
A total number of two hundred fifty patients of both sexes with various degree of severity of alopecia areata. The patients were collected from multiple private dermatological clinics from January 2018 to July 2018.

All patients asked about their ages, duration of disease, personal and family history of the atopic dermatitis. All examined to determine the site, severity of lesions, the

presence of nail changes and associated with atopy, autoimmune diseases.

**RESULTS**

Analysis of 250 patients with alopecia areata show that 155 patients (62%) were males, and 95 patients (38%) were females as show in figure (1).



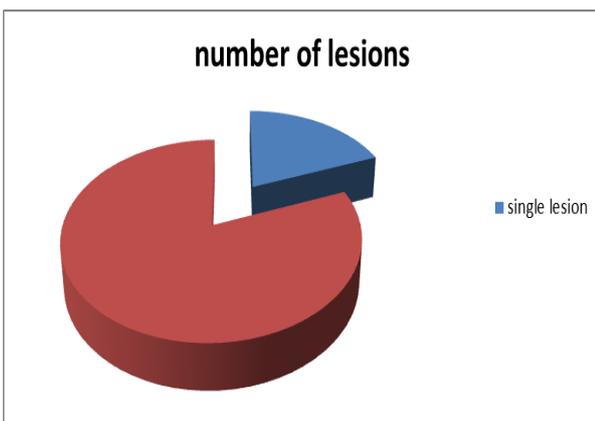
**Figure (1): Sex distribution of the patients.**

Ages of patients range from 4 years to 58 years with mean 27.3 SD±4, most age group is between 21years—30 years (28.8%) followed by age group 31years—40years(19.2%), then 16.8% between 11years—20years, 12.8% between 0 to 10 years, 8.4% between 51 years—60years as show in table (10).

**Table 1: Ages groups of patients.**

Age group (years)	Number	Percent
0 -- 10	32	12.8%
11-- 20	42	16.8%
21-- 30	72	28.8%
31--40	48	19.2%
41--50	34	13.6%
51 --60	22	8.4%
Total	250	100%

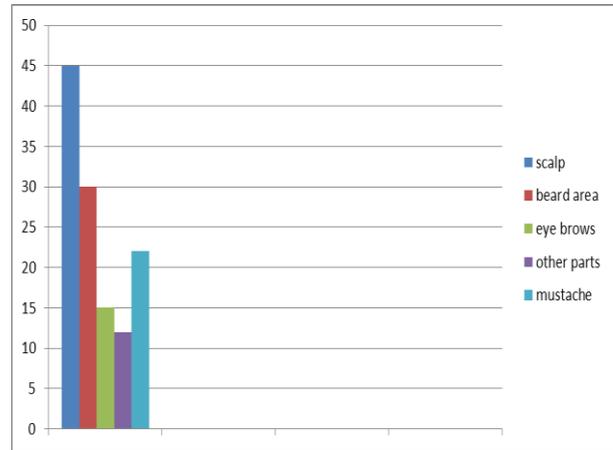
Only in 19.2% (48 patients) had only single lesion other 80.8% (202 patients) had more than one lesion. as show in figure (2).



**Figure (2): Number of lesions.**

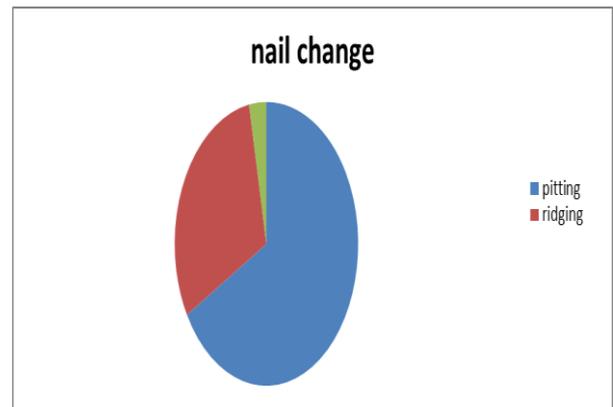
Most common site involved is the scalp 45%, beard area 30% mustache 22%, eye brow 15%, other parts of body 12%. As show in figure (3).

Note: the percent of involved more than one hundred percent because most patients had more than one site involved.



**Figure (3): percentages of sites involved.**

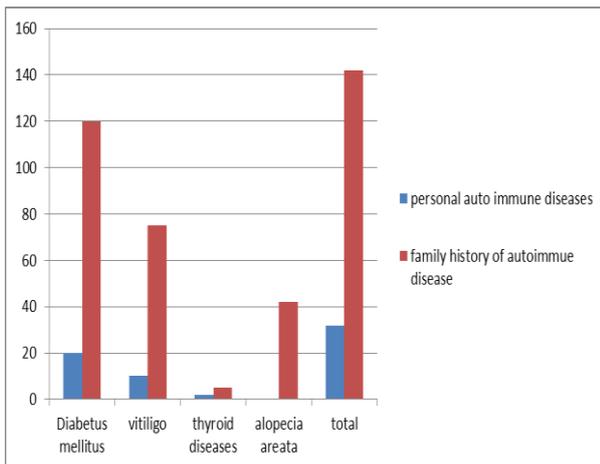
Nail changes were found in only 22% (55 patients) of patients with alopecia areata, most common nail changes is pitting 80% (44 patients) nail ridging in 36.6% (20 patients), only 2 patients had nail dystrophy as show in figure (4).



**Figure (4): Nail changes.**

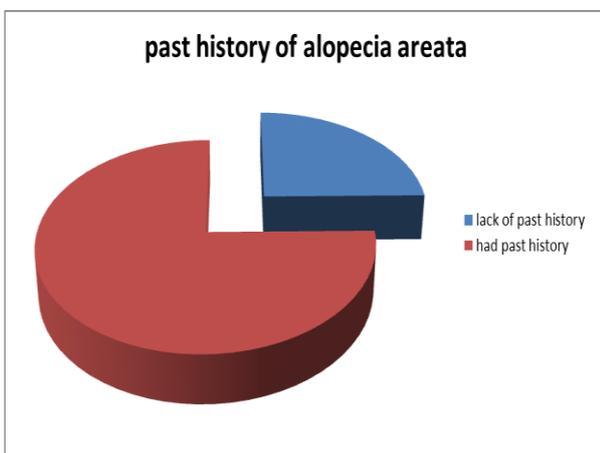
Autoimmune disorders that was found in 32 patient's (12.8%), most common autoimmune disease was the diabetes mellitus (20 patients) and followed by vitilligo(10 patient) thyroid disease (2 patients).

Family history was present in 142 patients (56.8%), family history of diabetes mellitus in 120 patient, alopecia areata in 75 patient's vitiligo in 42 patient's thyroid disaeses in 5 patientes some patints had family history of more than one diseases, as show in figure (5).



**Figure 5: Personal and family history of autoimmune diseases.**

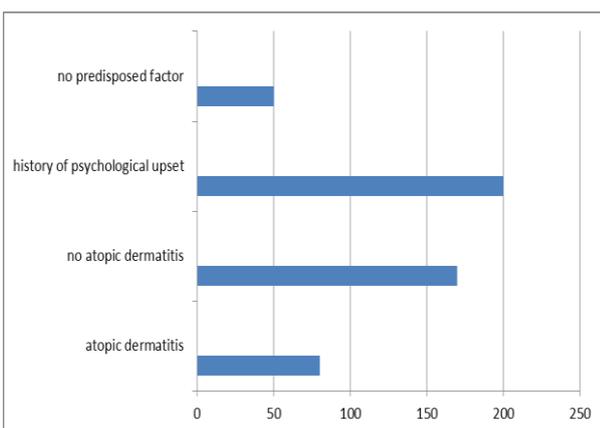
Most patients 75.2% (188 patients) had past history of alopecia areata as in figure (6).



**Figure 60: Past history of alopecia areata.**

Most common predisposed factor is psychological upset which was present in 80% of patients (200 patients) within one week from appearance of the lesion.

Atopic dermatitis present in 32% of patients (80 patients) as show in figure (7).



**Figure (7): History of atopic dermatitis and predisposing factor.**

## DISCUSSION

Alopecia areata typically presents with round patches of hair loss. Patches may be single or multiple, and may coalesce. Although most obvious on the scalp, any hair-bearing skin can be affected, and frequently found to involve the beard area.<sup>[19]</sup> AA can affect both sexes the males to females ratio varies from one study to another. In some study both sexes were affected equally such as.<sup>[20]</sup> In this study males were affected more than females this go with other study and this study contributed to the fact that the present study was based on a multiple private clinics.

The mean age group in this study was 21 -30 years (28%). This nearly compatible with many other studies such as.<sup>[21]</sup>

In this study most patients(80%) had more than one lesion this go with most other studies. and more than what mentioned in other studies such as.<sup>[22]</sup> The most common site involved area in this study is scalp followed by beard area then mustache area this agree with most mentioned in most other studies.

Highly association of AA with autoimmune diseases in this study go with most other studies. And most common cutaneous disease associate with AA is Atopic dermatitis this also go with other studies.<sup>[23]</sup> The most common predisposed factor in this study was psychological distress which find in 200 patients which similar to many other studies such as.<sup>[24]</sup>

We conclude that AA is disease of all age but most frequent in young age group usually associated with other autoimmune disease and with atopic dermatitis, most patients presented with more than one area and psychological upset is most common predisposed factor.

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