

## Nail Damage and Alopecia Areata

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### ABSTRACT

Alopecia areata is a chronic, autoimmune disease. The main symptom is massive hair loss, localized or diffuse, in the scalp and the whole body. However, nails may also be involved, and brittleness, fragility and pitting can be signs of nail dystrophy in AA patients. Our studies showed the prevalence, and the different types of anomalies nail in patients with alopecia areata.

### **KEYWORDS**

Alopecia areata; Nail; Pronostic

### **1. INTRODUCTION**

Alopecia areata (AA) is an autoimmune disease specific to the hair follicle. Nail damage is frequent. Our study is the second one in the Maghreb whose aim is to evaluate the prevalence, clinical aspect and prognosis of nail damage in the alopecia areata.

### **2. Study Objective**

To specify the epidemiological profile of the ungual anomaly during alopecia areata and evaluate the prognosis of the patients with the different diseases found.

### **3. Materials and Methods**

We conducted a retrospective study of all cases treated with corticosteroid boluses with nail involvement seen in the dermatology department of the Hassan II University Hospital in Fez between January 2010 and May 2019.

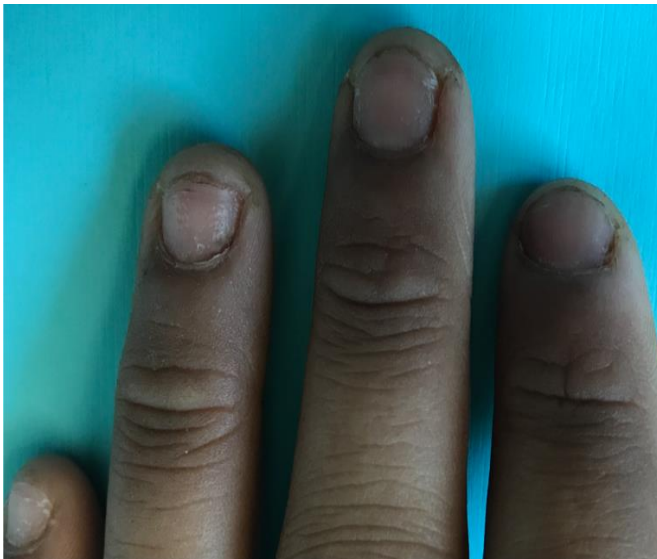
### **4. Results**

One hundred and twelve cases with alopecia areata (AA) were hospitalized and treated by corticosteroid bolus, of which 39 cases had nail involvement (34.8%). The average age of the patients was 20 years (with extremes between 4 years - 54 years). 29 cases (74%) were children under 15 years of age, the nail problem was asymptomatic in all our patients but it had an unsightly impact especially on children most of them come with nail polish camouflage. Dermatological examination of the fingernails and toenails revealed the presence of trachyonychia in 21 cases (53.7%), pitting in 12 cases (30%) (Figure 1), longitudinal leukonychia in 4 cases (10%) (Figure 2), 1 case of onychomadesis (5%), and 1 case with pigmented longitudinal bands (5%) (Figure 3). These conditions were associated with a moderate clinical form of single or multiple plaque of AA in 12 cases (25.8%), and with a severe alopecia areata

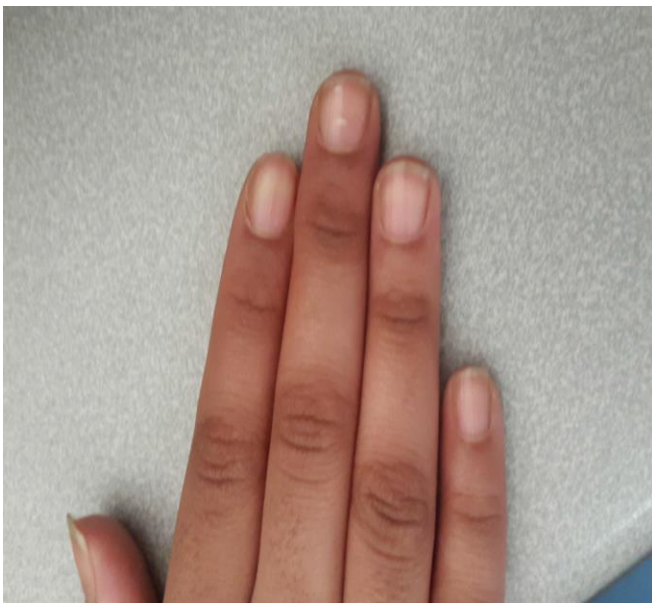
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including alopecia total is, and alopecia universal is in 27 cases (70.1%). The most patients who press these nail abnormalities do not respond well to treatment.



**Figure 1:** Clinical image of pitting.

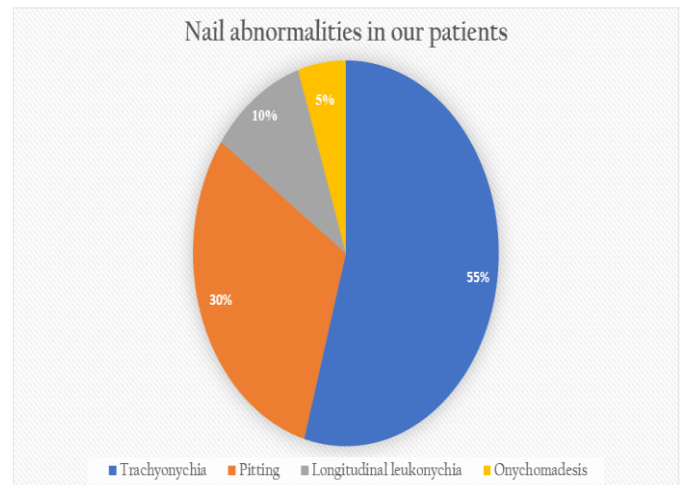


**Figure 2:** Clinical image of punctate leukonychia.

## 5. Discussion

Nail abnormalities are present in 14%-66% of adult patients with AA and may be even more common in the pediatric population. It is 35% in our patients, which is consistent with the data in the literature [1-3]. The pathophysiology of these changes is incompletely

understood. The risk of nail changes has been shown to correlate with the severity of disease; alopecia total is (AT) and alopecia universal is (AU) are the most closely associated variants. The most common nail changes associated with AA are pitting (15%) and trachyonychia (8%-14%).



**Figure 3:** Pie chart shows the different nail anomalies in patients with alopecia areata.

Other reported changes include red spotted lunulae, longitudinal ridging, punctate leukonychia and pigmented longitudinal bands. Interestingly, abnormalities of the toenails are rarely seen. Several authors agree on the pejorative nature of the nail injury on the one hand on the quality of life and on the other hand on the evolutionary profile of the alopecia areata.

## 6. Conclusion

Nail lesions in alopecia areata have a double unsightly effect on the patient, often neglected and poorly treated by doctors, patients with these disorders constitute a factor of poor therapeutic prognosis, whose pathophysiology is poorly understood.

## References

1. Arousse L, Boussofara A, Aounallah R, et al. (2017) Nails during alopecia areata: Results of a prospective study. *Annals of Dermatology and Venereology* 144(12): S230.
2. Chelidz K, BS, Khatiya Chelidz, et al. (2017) Nail changes in alopecia areata: Case report and review of the literature. *Journal of the American Academy of Dermatology* 76(6): AB175.
3. Dhayalan A, King BA (2016) Tofacitinib citrate for the treatment of nail dystrophy associated with alopecia universalis. *JAMA Dermatology* 152: 492-493.