

# Evaluation of clinical-pathologic causes of scarring alopecia in patients referred to dermatology clinic of Imam Reza Hospital in Ardabil, Iran, during the year of 2018

## Abstract

**Background and Objective:** Cicatricial (scarring) alopecias form a group of disorders in which permanent hair loss results from replacement of hair follicles by fibrosis or hyalinized collagen, which includes two types; primary types such as DLE, LPP, FFA, folliculitis decalvans and secondary types are like Kerion and Morphea. The aim of this study was to evaluate the frequency of different types of scarring alopecia in patients referred to Imam Reza Dermatology Clinic in Ardabil during the year of 2018.

**Methods:** In this descriptive cross-sectional study, 96 patients referred to the dermatology clinic of Imam Reza Hospital, Ardabil, Iran, with clinical diagnosis of scarring alopecia during the year of 2018, underwent to clinical examination and KOH smear for Kerion disease and for diagnosis of other types of scarring alopecia were subjected to scalp biopsy and pathologic examination of the biopsy specimen. Epidemiologic features such as age, sex, and place of residence of patients, as well as the frequency of clinical and pathologic causes of primary and secondary cicatricial alopecia were analyzed using descriptive statistics in SPSS ver 16 software.

**Results:** Of the 96 patients studied, 71 persons (73.95%) were males and 25 persons (26.04%) were females. Also 43 persons (44.79%) were urban and 53 were rural (55.2%). The majority of patients in the city (22 patients or 51.16%) had DLE and the majority of patients in the village (49 patients or 92.45%) had kerion. The most common causes among patients with primary cicatricial alopecia were in order: DLE (25 patients or 26.04%), LPP (6 patients or 6.25%), acne keloidalis (4 patients or 4.16%), Folliculitis decalvans (2 patients or 2.08%), FFA (2 patients or 2.08%), pseudopelade of Brocq (1 patient or 1.04%). In patients with secondary cicatricial alopecia, the most common causes were in order Kerion (53 or 55.2%), followed by Morphea, cutaneous lymphoma and scarring alopecia secondary to burn with an equal prevalence (either one person or 1.04%). The mean age of patients with kerion disease was  $9.77 \pm 3.18$ , DLE  $37.32 \pm 11.67$ , LPP  $39.5 \pm 9.46$ , Acne keloidalis  $35.75 \pm 10.49$ , FD  $26 \pm 6$ , FFA  $29 \pm 1$ .

**Conclusion:** Considering the fact that the majority of patients had kerion disease (55.2%) and were rural children (92.45%), we can prevent the spread of the disease with increasing the level of hygiene as an important factor in controlling this disease and early diagnosis in children and treating them.

**Keywords:** Scarring alopecia, Cicatricial alopecia, Lichen planopilaris, Discoid lupus erythematosus, Frontal fibrosing alopecia, Folliculitis decalvans, Kerion.