

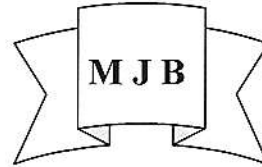
## Dignosis of favus due to *Trichophyton violaceum* in Hilla-Iraq

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### Case Report



### Abstract

15 years old-girl infected by *Tinea capitis* since 10 months and diagnosed as Favus type according to clinical feature, family history and mycological examination. *Trichophyton violaceum* was the etiological agent to this type of infection.

### الخلاصة

شخصت الإصابة بسعفة الرأس (*Tinea capitis*) من نوع favus لأول مرة في العراق بعد اختفائها منذ فترة طويلة عند فتاة عمرها 15 سنة اعتمادا على العلامات السريرية والفحص المختبري. حدد نوع الفطر المسبب وهو *Trichophyton violaceum* بعد تشخيصه في المختبر.

### Introduction

Favus is a dermatophyte infection of scalp but may affect the glabrous skin and nails (1), on the scalp, concave sulfur-yellow crusts of fungus mycelium and epithelial debris (2) from around loss wiry hairs with a distinctive mousy odor, atrophy ensues, leaving glossy, thin, paper white patch.

Infection occurs as a sporadic cases (2), usually transmitted from fathers or mothers or both in the family (3) to their children under the age of 14 years that might disappear after puberty (4).

Favus is a type of endothrix infection most commonly caused by

*Trichophyton schoenleinii* (2,4), While *T. violaceum* is a predominant causative agent of endothrix of scalp in Iraq (5, 6), Jordan (3), Iran (7), Portugal (8) and Israel (9), but is rarely seen in Italy (10) and USA (11).

In Iraq, Favus was previously common as reported before (5,6), but it is completely vanished since 2004, so we reported this case to shed the light for the recurrence of this disease to our country again.

**Materials & Methods:****1- Case report**

15 years old-lady presented to the private clinic in Hilla with progressive hair loss of 10 months duration. Her father had the same condition in his youth, they live in rural area. A young-aged healthy lady had scarring alopecia affecting frontal and most of the occipital area of the scalp with presence of pustules, the remaining hairs lost its luster, easily removed by hands with a lot of scales in between the hair as shown in figure (1).

**2- Mycology**

Direct microscope examination of patient hair and scales with 20% KOH, then culturing on a petri containing Sabourauds glucose agar prepared from (20gm glucose, 10gm peptone, 15gm agar, 0.001gm thiamin, 0.5 cycloheximide, 0.05 chloramphenicol, 1 liter of D.W ), and incubated at 25- 28 C° for 1-2 weeks.

**Results:**

Direct microscope examine of hair revealed endothrix type of spores. The fungus appear after culturing was *Trichophyton violaceum* forming a small, moist, glabrous, purple color and heaped colony and a mass of poorly formed mycelia (11) Figure (2).

**Discussion**

Although it is well-known that favus is caused by *T. schoenleinii* (1,2), but other causative agents can give the same clinical picture like *T. violaceum* and *Microsporum gypseum* (2, 13).

Favus was accounted in 10% of *Tinea capitis* affecting Iraqi adults during the year 1966, whereas *T. violaceum* was not including it's a causative agents in one study (5), while in others *T. violaceum* was predominate

one (6) and on cases of favus infection has reported since 1988 (14). In Jordan, favus was accounted for 1% of *Tinea capitis* cases (3).

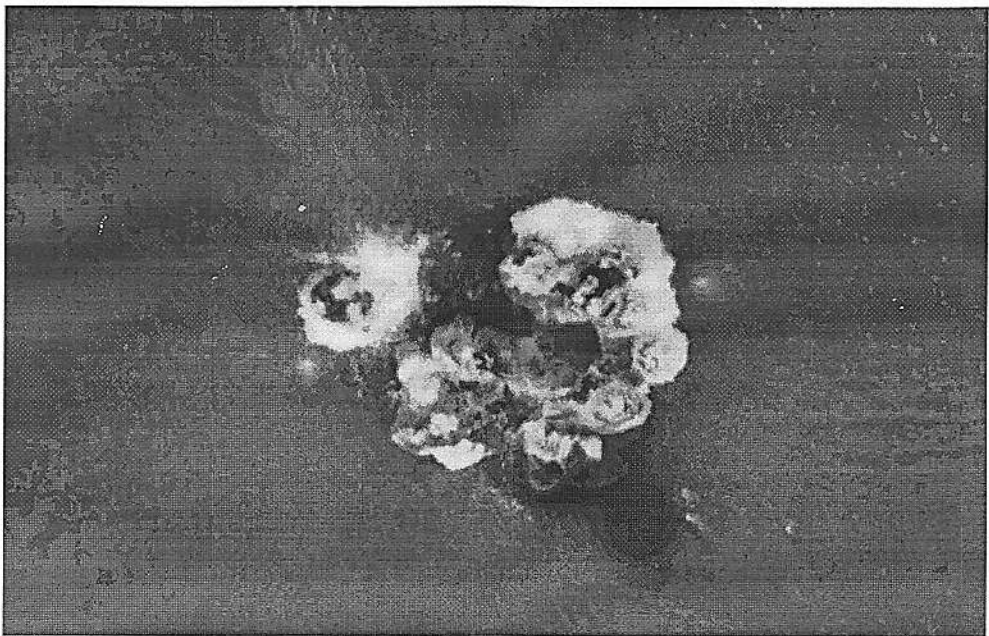
Our case in this study is a female at 15 years presented with typical history and clinical picture of favus.

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**Figure 1** Old lady ( 15year ) with favus infection by *T. violaceum*.



**Figure 2** Colony growth of *T. violaceum* on Sabourauds agar.