

## Kerion Celsi with erythematous tumefaction on the groin due to *Trichophyton mentagrophytes*



### Querion de Celso con tumefacción dolorosa en la ingle por *Trichophyton mentagrophytes*

Dear Editors,

A 19 year-old man presented with a 10-day history of painful erythematous tumefaction on the left groin, with pustules, bald areas and erythematous-desquamative plaques on the pubis (Fig. 1). The patient had low-grade fever, general malaise and bilateral adenopathy. He had recently had unprotected sexual intercourse, and he remembered that the woman had a cutaneous lesion in the genital area. Serology for syphilis, HCV, HBV, HIV, and HSV were negative.

Microscopic examination of the purulent exudate was undertaken, revealing the presence of multiple hyphae (KOH, 400×) (Fig. 2). *Trichophyton mentagrophytes* was isolated in culture (Figs. 3 and 4). Colonies on Sabouraud dextrose agar had a granular texture, with a white to cream color on the front and a yellowish one on the reverse. Microconidia were round and organized in closely rebranched clusters; macroconidia were multiseptate with thin and small walls. Urease test was positive. Hair perforation test was positive. On Potato dextrose agar the colonies were white on the reverse.

The patient was treated with a 6-week course of oral terbinafine, 250 mg/day, with complete remission of the symptoms and no recurrences during the following year. Kerion Celsi is an inflammatory variant of *tinea capitis* or *tinea barbae* which is usually caused by zoophilic species.<sup>2</sup> It is often confused with bacterial abscesses and its course may be favored by wrong treatments.<sup>1</sup> The gold standard—fungal culture—plays a crucial role in the early recognition of any dermatophyte infection. Kerion Celsi on the genital area<sup>1,4–6,8,10</sup> or on the pubis<sup>1,5,8</sup> is an exceptional location and it may represent a rare sexually transmitted condition, requiring early diagnosis. The involvement of pubic and/or genital areas in dermatophytoses is usually linked to the spreading of *tinea cruris* lesions.<sup>3,7</sup> However, recently published case series by Luchsinger et al. described *tinea genitalis* as a new entity of sexually transmitted infection.<sup>8</sup> Connubial *tinea gladiatorum*<sup>9</sup> have been reported recently among commercial sex workers.<sup>8</sup> On the basis of the patient's history, an indirect route of transmission can be hypothesized in our case.

Dermatophytic suppurative lesions may be easily misdiagnosed as bacterial infections. Differential diagnosis of adenopathy and

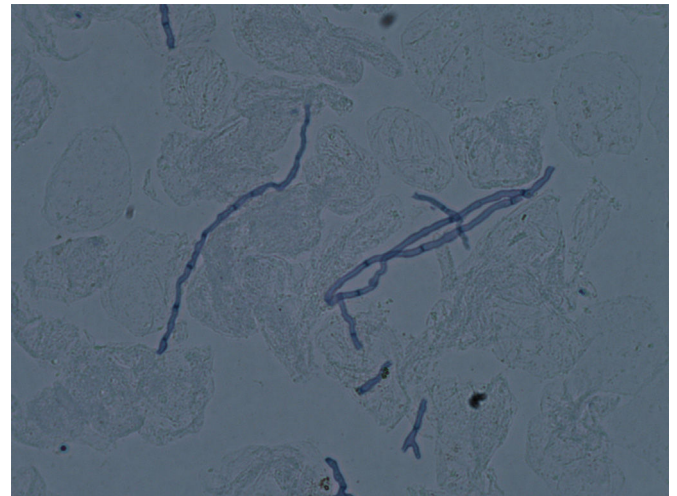


Fig. 2. Multiple hyphae observed on direct microscopy (KOH, 400×).

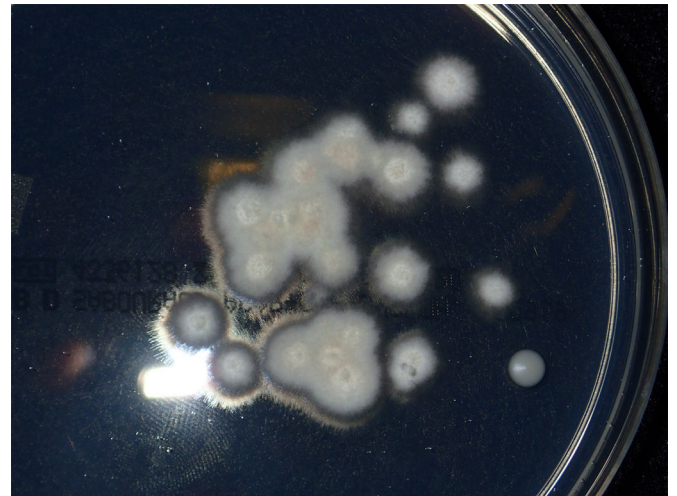


Fig. 3. *Trichophyton mentagrophytes* isolate on Sabouraud dextrose agar (25 °C, 7 days).



Fig. 1. Erythematous tumefaction of the groin with pustules and bald areas.

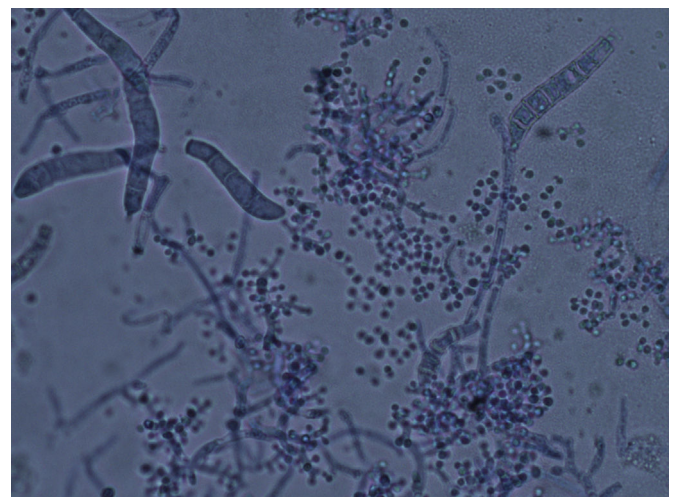


Fig. 4. Club-shaped macroconidia and numerous round microconidia on clustered branches (Cotton blue, 400×).

tumefaction on the groin should include chancroid, lymphogranuloma venereum, and granuloma inguinale. However, suppurative lesions, fever, adenopathies and alopecia in the pubic area should lead to the suspicion of Kerion Celsi (Fig. 1). In the distinction with Majocchi's granuloma it is useful the intradermal reaction with trichophytin, which is strongly positive in the Kerion Celsi and weak in the Majocchi's granuloma. The histology shows granulomatous inflammation, with few fungal elements in Majocchi's granuloma, and abundant fungal elements in Kerion Celsi.

Oral administration of terbinafine for 4–6 weeks is the preferred treatment in immunocompromised and non-immunocompromised patients. Systemic administration of antifungal agents is mandatory because topical application alone is usually ineffective. In order to avoid irreversible scarring alopecia, prompt initiation of antifungal treatment is essential along with an adequate isolation and identification of the pathogen.<sup>8</sup>

### Conflict of interest

The authors have not conflict of interest

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<http://dx.doi.org/10.1016/j.riam.2017.03.004>  
1130-1406/

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