CASE REPORT

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Tinea Corporis, Caused by Microsporum Canis - a Case Report From Kosovo

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ABSTRACT

INTRODUCTION: Tinea corporis (B35.6) caused by *Microsporum canis* which is fungal species that causes numerous forms of disease. It is part of a group of fungi known as Dermatophytes. Though mostly well known for ringworm in pets, it is also known to infect humans. This fact makes this pathogen both anthrophilic and zoophilic in nature. *Microsporum canis* is a communicable pathogen. **Case report:** We will report about a case, 22-year-old female, residing in a village, with typical changes of a mycotic infection caused by *M. Canis*. Dermatological description can be summarized with polymorphic erythematous, papulosquamous changes, erosions mainly on genital organ and spread to the thighs and lower abdomen which are accompanied with itching and burning. Diagnosis B35.6 was determined on the basis of clinical appearance complemented with anamnesis, microscopic examination and culture. The patient was treated successfully with general and local antimycotics and antibiotics.

Key words: tinea groin B35.6 caused by *M. Canis*.

1. INTRODUCTION

Dermatophytosis (tinea) infections are fungal infections caused by dermatophytes - a group of fungi that invade and grow in dead keratin (1). Infection is limited to the dead layers of skin but encouraged by a damp and warm local environment. The infection can be transmitted to humans by anthropophilic (between people), geophilic (from soil) and zoophilic (from animals) spread (2). Infection is very common all over the world. Tinea cruris is three times more common in men than in women because of the scrotal anatomy (3, 4). Itching, rash and nail discoloration are the most common symptoms of tinea infection (2). Tinea cruris, commonly referred to as "jock itch," involves the medial aspect of the upper thighs (groin) (5, 6). Complications such as secondary infection (cellulitis and impetigo) can lead to symptoms (2). The skin lesions have annular scaly plaques with raised edges. More unusually

the lesions can appear as overlapping concentric circles (tinea imbricate) (7).

Reactions to a dermatophyte infection may range from mild to severe as a consequence of the host's reactions to the metabolic products of the fungus, the virulence of the infecting strain or species, the anatomic location of the infection, and local environmental factors (8).

Fungal transmission occurs through direct contact with infected persons, animals, soil or fomites. Zoophilic sources should be identified (if possible) and treated to prevent human reinfection (9). The classic presentation of tinea infection, known as "ringworm," is a lesion with central clearing surrounded by an advancing, red, scaly, elevated border. One or more lesions may appear. Inflammation assists in colonization and may result in vesicles on the border of the affected area. Atopic persons and those infected with zoophilic fungi tend to

have more inflammation. The presentations of tinea infections range from mild scaling and erythema to severe inflammation with bacterial superinfection.

The differential diagnosis: Multiform erythema, annular granuloma, nummular dermatitis, rosea pityriasis, versicolor pityriasis, psoriasis, Secondary syphilis, candidal intertrigo.

We report on a case diagnosed not directly due to delay of visiting a doctor by the patient because of stigma and prejudice attributed to local environment, lack of experience of the family doctor and specialist regional dermatologist in right diagnosis and treatment. The case is a 22-year-old female, with mycotic infection in the genital area (Figure 1).

2. CASE REPORT

Female, 22 years old, lives in the village, hospitalized due to skin changes in the genital pubic part, thighs and lower abdomen, which are accompanied with extraordinary itching and burning.

The changes had started much time before but she delayed her visit to the doctor to the point when her condition deteriorated with fever and temperature. She was treated unsuccessfully for two months in a row and the disease advanced. The changes began with rash and itching presented in genitalia and then changes spread to areas around. In anamnesis, the patient denies that other members of the family have similar changes whereas she claims to own and have in family care a dog and a cat and no other domestic animals. She comes from a low level of socio-economic status. In dermatological description, changes are polymorphic, plaques in the pubic area with erythematous fluorescence, pustules, erosions, crusts and papulosquamous changes in the shape of circles in thighs and lower abdomen which are accompanied with intensive itching. The center of the circles is inactive while the surrounding is active with distinctive bordering line to the skin around. Due to scratching because of itching, there was a secondary overlapping bacteriological layer. Diagnosis was determined on the basis of clinical appearance, anamnesis, positive dermatophytes microscopic view and culture *M. Canis*. The patient was treated with general and local antimycotics (terbinaphin 250 mg/day for 4 weeks), as well as with antibiotics according to sensitivity chart.

3. DISCUSSION

From the anamnesis of the reported case is emphasized the continuous itching which never stopped for the whole time being described as terrible and which corresponds to the literature.

Also, the humidity of the genital area itself, washing with water after each defecation and urination (Islamic belief tradition), was a suitable ground for the develop-

Figure 1. Patient's status before starting treatment and after beginning of treatment

ment of the disease. The differential diagnosis was: Multiform erythema, annular granuloma, nummular dermatitis, rosea pityriasis, versicolor pityriasis, psoriasis, Secondary syphilis, candidal intertrigo but we were also based on clinical appearance, anamnesis complementing it with microscopic examination and fungal culture.

4. CONCLUSION

We consider that the report on the mentioned case will be beneficial to family doctors so they can complement their professional experience with more extensive knowledge on clinical manifestation, diagnosis and differential diagnosis.

CONFLICT OF INTEREST: NONE DECLARED

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