

CASE REPORT ON TINEA CORPORIS

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ABSTRACT:

Introduction: Tinea corporis is an anthropophilic dermatophyte distributed worldwide and is responsible for external mycosis with various clinical manifestations. We report a typical case of tinea corporis in an adult. Tinea corporis is a fungal infection that causes infections. The rash is usually painful and round, with clear skin in the middle. The appearance of the ring gives it its name. No worm is involved. Tinea corporis is spread by fungal seeds that come out of sick skin. It is warm, moist nature helps to transfer, as do share forms of bedding, towels, and blankets. Tinea pedis, a dermatophyte disease, can spread to other body parts. The incubation period is 7-21 days. In healthy, the dermatophyte infects and extends through the skin's stratum corneum, but it cannot enter deeper layers.

Patient history: A 22 year male visited in dermatology OPD by doctor's advice. The patient was admitted to the dermatology ward in rural Hospital with the complaint of multiple itching over the toe and upper arm since 2 weeks ago. When the patient develops itching back and upper limbs. The itching was moderate intensity—no complaint of fluid field lesion, no complaint of fever.

Primary diagnosis, treatment interventions, and outcome: This case of tinea corporis was detected after a physical examination and a medical examination. The client was treated with antibiotics, anti-inflammatory and ointment. Also, provided protein supplements, the patient's general condition was moderate.

Nursing Management: Administered IV fluids, antibiotics, anti-inflammatory medications, vitamin supplement antifungal and analgesics, monitored vital signs for two hours and administered medication as per doctor's order.

Conclusion: Timely treatment and management of tinea corporis can help control the infection.

Keywords: Tinea corporis, Ringworm, Skin, Dermatology, Management

INTRODUCTION:

Tinea corporis, like other tinea diseases, is a fungus on the body.¹ The arms and legs are affected by this type of Ringworm, particular. the glossy skin; however, it can affect any body region exposed to air.² It can take various forms; The most obvious are the red rising rings with the cleared middle (circle).³ The worm it may develop On the skin (tinea capitis), the beard (tinea baebae), or the crotch (tinea barbae) (tinea cruris, also known as jock itch or dod). itching and other old tinea corporis symptoms include itching when you scratch an infected area. The edge of the ridge appears elevated and sharp when touched. The skin around the rash can stand up and sometimes stick. Hair loss is almost always present in the affected areas^{4,5}.

The disease can also be tinea corporis caused by a dermatophyte and a tiny fungus.⁵ These is small insects often and lives on the skin. If the opportunity is right, they can cause rashes or infections.⁶ transmission from animals to humans is also prevalent. Worms are commonly found in pets (dogs, cats), and fungi can be found while petting or grooming an animal. Worms can be found in other animals such as horses, pigs, ferrets and cattle. Inanimate objects infected by the affected person, including as personal care products, bed linen, camps running gears, or hair brushes, can also spread the fungus. On the skin (tinea capitis), the beard (tinea baebae), or the crotch (tinea barbae) (tinea cruris, also known as jock itch or dod). Other old tinea corporis symptoms include itching. People most at risk of getting worms include those who live under dense, wet, and sweaty conditions. Sweat might get a damp spot where pathogenic fungus can thrive. Armpits, groyne creases, and skin folds are the most prevalent locations.

PATIENT INFORMATION:

Patient-specific information: A 22-year male was visited in dermatology OPD with the complaint of multiple itching over the toe and upper arm since 2weeks ago. After that patient was admitted to the dermal ward by doctor's advice on dated 10/2/2022 with the criticism of numerous itching over the toe and upper arm since2weeks ago. When the patient is developing itching back and upper limbs, the itching is moderate intensity. No complaint of fluid field lesion, no complaint of fever.

After a physical examination and examination, the doctor found the case of tinea corporis.

The primary concern and symptoms of the patient: Present was admitted to dermatology ward in Tertiary Care Hospital on dated 10/2/2022 with the complaint of multiple itching over the toe, and upper arm since2weeks ago. When the patient is developing itching back and upper limbs. The itching was moderate intensity. No complaint of fluid field lesion, no complaint of fever.

Patient past medical and surgical history as well as family history and psychiatry:-A patient suffering from tinea corporis, a patient with no past medical and surgical history is part of a nuclear family that was well orientedto time, place and person and maintained a positive relationship with family members. He kept himself clean. In the family of patients, there is no genetic history such as asthma, tuberculosis, or diabetes.

Habit:-Watching TV, singing songs, reading the newspaper, and sleeping patiently is not bad habits, such as chewing tobacco or smoking.

Patient present medical: Patient He was admitted to Rural Hospital on the day10/02/2022 with chief complaints of multiple itching over the toe and upper arm since2weeks ago. When the patient develops itching back and upper limbs, after a physical examination and examination, the doctor finds the case of tinea corporis.

Present surgical history: - No, any present surgical history.

CLINICAL FINDINGS:The patient had moderate built and he had maintained good personal hygiene. His blood pressure was normal, 126/76mm of Hg, and his heart rate was 78beats/min.

TIMELINE:

DIAGNOSTIC ASSESSMENT:

Diagnostic methods: A collection of patient history and physical examinations are performed.

- Visual and clinical scrutiny of the skin in the wet area of potassium hydroxide. Treatment involves topical or oral antifungals. Tinea corporis is a dermatophytosis. Signs and symptoms vary depending on the location of the infection.
- Potassium hydroxide (KOH) test for skin scratching can be detected in tinea corporis. The KOH test is a minor modification used to visualize fungal elements released from the stratum corneum. Of the skin. To perform the KOH test, fungal lesions are excised with a scalpel blade.
- Tinea corporis, tinea cruris, and tinea pedis can generally be identified based on appearance, but if abnormalities are discovered, potassium hydroxide or culture should be used.
- Acceptable drugs for tinea corporis, with short doses of griseofulvin, include terbinafine (Lamisil) and fluconazole (Diflucan).
- Before beginning treatment, confirm the diagnosis of onychomycosis with tests such as potassium hydroxide preparation, culture, or periodic acid-Schiff stain. If your doctor suspects that you may have worms, you will check your Reliable Source for your skin and may undergo further tests. Usually, a skin test will lead to a diagnosis
- Your doctor may also check the scratches on the affected area under a microscope to check the fungus. They may send a sample to the laboratory for confirmation. The laboratory may test the culture to see if the fungus is growing.

BLOOD INVESTIGATION:

S.R. NOName of investigation Patient value

1.Haemoglobin	15.9	
2.Mean corpuscular haemoglobin count MC	34.2	
3.Mean corpuscular volume MCV	86.	
4. Total red blood cells count	5.38	
5.Total white blood cells count WBC	11400	
6.Total platelets count	2.31	
7. Monocyte		01
8. Granulocyte		88
9. Lymphocyte	10	
10.Red cell distribution width RDW	14.5	

Diagnostic challenges:There are no challenges during the diagnostic test.

Therapeutic Intervention:

The present case of tinea corporis was treated with antibiotics, anti-inflammatory, vitamin supplements, antifungal and analgesics etc. And all skin tests are done.

Name of medication Dose Frequency

Injection ceftriaxone 10mg Twice an in a day

Injection pantaprazole 40mg One time in a day

itraconazole 100-200mg/day For one month

Terbinafine 250–500 mg/day For ½- 1 month

Nursing perspective: IV fluid was given to maintain water and electrolyte imbalance. Monitor significant symptoms and check blood pressure for 2 hours. Observe the exit chart for 2 hours.

FOLLOW UP:

The patient was advised to exercise daily, avoid high cholesterol diets, and be given a healthy diet: Normal checkups, personal hygiene, and medication adherence.

Outcomes:

Despite all the excellent patient development, he was advised to avoid the hard work the advice to take complete bed rest.

Adherence to intervention and tolerance:

The patient took all the prescribed medication, according to diet, without adherence to the intervention. The patient has tolerated appropriate treatment.

DISCUSSION:

Clinical manifestations of *T. tonsurans* can vary greatly. Unlike other dermatophytes, *T. tonsurans* infection has distinct clinical characteristics. Less pronounced. Tinea capitis "dark spot" is an old infection caused by *T. tonsurans* where episodes of alopecia are found with weak hair that breaks above or below the scalp's head.⁸ The sharp, red, and light appearance of the scalp is ideal known as a method of kerioncelsi. In the form of seborrheic *T. tonsurans* tinea capitis, a slight rash with erythema on or outside the scalp appears.⁹ Tinea corpora because of small, pink, open tonsils are the second most common clinical feature of *T. tonsurans*. Plaques usually measure only 1-2 cm in diameter without moderate filtration, similar to the appearance of eczema.

However, there are various *T. tonsurans*-related clinical signs in asymptomatic carriers to a severe manifestation of inflammation. Rare cases of *T. tonsurans* infection reported earlier. Indeed, *T. tonsurans* can cause inflammation of the tinea capitis through an abnormal presentation, Impetigo, folliculitis, pyoderma, and cutaneous cellulitis are frequently misdiagnosed.^{5,7-9} We present an instance of kerioncelsi here, which looks like a dermatophyte. Zoophilic-like. Canis, especially as noted in the previous contact with the cat. Therefore, *Ts.* the tonsured was unexpected, although the U.V. test for skin wasn't fluorescent.

An accurate and timely diagnosis of kerioncelsi is essential. Getting a head injury may help avoid misdiagnosis.¹⁰ Indeed, failure to get a precise diagnosis of kerion can cause permanent scars, alopecia, or unnecessary cuts or dehydration. In addition, topical corticosteroid antibiotics were misused to treat this inflamed sore. Or external antifungals may cause additional ulcers.

Abnormally distributed skin reactions may occur with *T. tonsurans* through anthropophilic type. A rare case of the famous erythematous has been reported in children and young men in Poland.¹¹ In Japan, tinea faciei and tinea corporis have been recorded in a 12-year-old girl on several occasions. Occasionally, there have been reports of tinea corporis, and tinea spread among youngsters returning from Algeria. Non-standard dermatophyte Algeria is the only country with *tonsurans* and epidemiological data for dermatophyte infection. Dermatological manifestations in Covid affected cases and patients taking steroids were reported¹²⁻¹⁶.

The *T. tonsurans*, according to the report, can cause unusually long skin lesions and acute tinea capitis, which is rare in anthropophilic dermatophytes. Since kerioncelsies are often unknown or misdiagnosed, mycological scalp analysis should be done to obtain an accurate and timely diagnosis and treatment.

CONCLUSION:

A 22 year male was admitted to the dermat ward in rural Hospital with the complaint of multiple itching over the toe and upper arm. After physical assessment and investigation patient was diagnosed with tinea corporis. Patient treated with IV fluids, antibiotics, anti-inflammatory medications, vitamin supplement antifungal and analgesics, monitored vital signs for two hours and administered medication as per doctor's order. Now patients general condition is moderate.

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