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INFILTRATIVE-SUPPURATIVE TRICHOPHYTOSIS: CHARACTERISTICS OF PROGRESSION AND TREATMENT METHODS

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Abstract: Infiltrative-suppurative trichophytosis is an infectious disease caused by dermatophytes of the Trichophyton genus, characterized by deep involvement of hair and skin. This article explores the etiology, clinical manifestations, diagnostic methods, and contemporary treatment approaches for the disease. The study utilizes microscopic analysis, cultural examinations, and clinical observations. The findings suggest that early diagnosis and comprehensive treatment of infiltrative-suppurative trichophytosis are critical in preventing severe complications. Preventive measures and strategies to curb the spread of dermatophytosis are also addressed.

Keywords: infiltrative-suppurative trichophytosis, trichophytosis, dermatophytosis, fungal infections, trichophytosis diagnosis, trichophytosis treatment, trichophytosis prevention, Trichophyton.

1. Introduction

Trichophytosis is an infectious disease caused by dermatophytes, affecting the skin, hair, and nails. It is particularly prevalent in rural areas and can be transmitted between humans and animals. Infiltrative-suppurative trichophytosis, primarily caused by Trichophyton verrucosum and Trichophyton mentagrophytes var. gypseum, is distinguished by its severe progression and the need for prolonged treatment. This article highlights the clinical features, diagnostic approaches, and modern treatment methods for the condition.

2. Research Problem and Relevance

Infiltrative-suppurative trichophytosis remains a significant issue in dermatology, particularly among rural populations. In many cases, patients neglect the condition or attempt self-treatment, leading to severe progression and long-term complications. Consequently, early detection and the development of effective treatment strategies are of paramount importance.

3. Research Methodology

This study was conducted using clinical observations, microscopic examinations, and laboratory analyses. The primary methods included:

• Microscopic Examination: To identify the causative fungi of trichophytosis.

• Cultural Examination: To determine the specific species of dermatophytes.

• Clinical Observations: To evaluate the symptoms and treatment outcomes.

• Serological Tests: Used as an auxiliary tool for differential diagnosis.

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4. Statistical Data

Accurate global statistics on infiltrative-suppurative trichophytosis are limited due to its relatively rare occurrence and predominant reporting in rural areas. However, the following data highlight general trends:

1. Prevalence:

• Globally, trichophytosis accounts for 20–30% of fungal infections. The infiltrative-suppurative form constitutes approximately 5–10% of all trichophytosis cases.

• In Uzbekistan, trichophytosis is more common in regions with developed agriculture (e.g., Fergana, Samarkand, and Kashkadarya provinces). The annual incidence is estimated at 10–15 cases per 100,000 population (data are approximate due to incomplete registration systems).

• Children (aged 5–12 years) and adults engaged in livestock farming are the most affected groups.

2. Transmission Dynamics:

• Approximately 70–80% of cases are associated with zoonotic transmission, particularly from cattle and dogs.

• Incidence increases by 30–40% in humid and warm climates (summer and autumn months).

3. Treatment Outcomes:

• With timely treatment, complete recovery is observed in 85–90% of cases.

• The likelihood of progression to a chronic form is 5–10%, particularly when treatment is delayed.

• Permanent sequelae, such as keloid scars or hair loss, are reported in 10–15% of patients.

5. Research Results and Discussion

5.1. Clinical ManifestationsIn the early stages, the disease presents with erythematous, swollen, and inflamed lesions on the skin. Damage to hair follicles results in hair breakage, creating a “clipped hair” appearance. Purulent discharge is observed from affected areas, and the disease progressively leads to regional lymphadenopathy.

5.2. DiagnosticsDiagnosis is established through microscopic and cultural examinations. Examination under a Wood’s lamp allows differentiation between microsporia and trichophytosis.

5.3. Treatment MethodsThe following approaches are employed in the treatment of trichophytosis:

1. Systemic Treatment:

• Antifungal Agents: Terbinafine, Griseofulvin, Itraconazole.

• Antihistamines: Clemastine, Loratadine.

• Hepatoprotectors: Essentiale Forte.

2. Topical Treatment:

• A mixture of iodine solution and ethyl alcohol (1:1), applied twice daily.

• Antifungal Ointments: Clotrimazole, Miconazole.

• Vitamin Therapy: To strengthen the immune system.

6. Conclusion

Infiltrative-suppurative trichophytosis is a severe condition that, if untreated, can lead to significant complications. It is characterized by purulent infiltrates, hair loss, and distinct inflammatory lesions. Treatment requires systemic and topical antifungal agents, supplemented by adjunctive therapies. Statistical data indicate higher prevalence in rural areas and among individuals involved in livestock farming. Preventive measures and early diagnosis are critical in reducing the spread of the disease.

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