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Disseminated Sporotrichosis in A Patient with Iatrogenic Immunosuppression Due to Suspected Pyoderma Gangrenosum

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1. Abstract

Sporotrichosis is a fungal infection that affects the cutaneous, subcutaneous and lymphatic tissue and is caused by dimorphic fungi of the Sporothrix schenckii complex, It is acquired by traumatic inoculation and rarely by inhalation, and is caused by the Sporothrix schenckii species complex (S. brasiliensis, S. globosa, S. mexicana, S. albicans, S. inflata, S. schenckii stricto sensu and S. chilensis). It frequently occurs in intertropical America: Brazil, Peru, Mexico, Colombia, Uruguay and Guatemala [1,2,3]. The number of cases is unknown; however, it is known to be high in areas such as Jalisco and the northern mountains of Puebla with approximately 25 cases per 1,000 inhabitants [4]. The infection is usually limited to the skin in immunocompetent patients, usually as lymphocutaneous sporotrichosis. Accurate diagnosis rests on clinical data and culture, and might be facilitated by biopsy identification of suppurative and granulomatous inflammation with fungal elements [5].

2. Clinical Case

We present the case of a 57-year-old male, originally from and resident of the state of Aguascalientes, Mexico, dedicated to beekeeping, who was treated in the dermatology service of the National Medical Center of the West for presenting a dermatosis on the right forearm, localized and asymmetric, approximately 5x5cm in diameter, warty in appearance with an ulcerated center and erythematous-violet edges, pruritic and painful to the touch, as important pathological history he has type 2 diabetes mellitus for 8 years with poor adherence to treatment and physical examination found lymphadenopathy at the level of the right upper extremity (Figure 1). Initially, pyoderma gangrenosum was suspected, so anti-TNFα and immunosuppressive treatment was administered. A week after starting treatment, the patient returned with lesions spread to the face, lower extremities and posterior thorax, so he was sent for mycological study to rule out fungal infection or possible leprous reaction type 2 (Figure 2,3,4,5).

Figure 1:

Figure 2:

Figure 3:

Figure 4:

Figure 5:

3. Material and Methods

Gram and Ziehl-Neelsen stains were performed to search for pathogenic microorganisms, where upon visualization of the Gram stain we observed elongated, "boat-shaped" yeasts of approximately two microns in diameter compatible with Sporothrix spp. Ziehl-Neelsen staining was negative for acid-fast bacilli. The patient was cultured on Sabouraud agar where, after 7 days, a white, slightly radiated colony developed which, over time, turned brown-brown, confirming Sporothrix schenckii complex by microscopy (Figure 6,7,8)

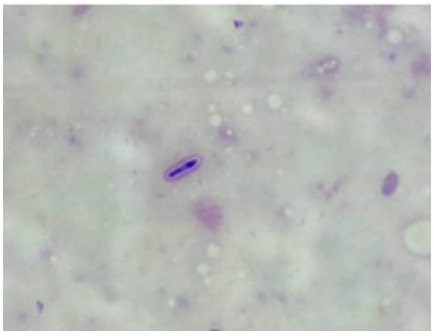

Figure 6:

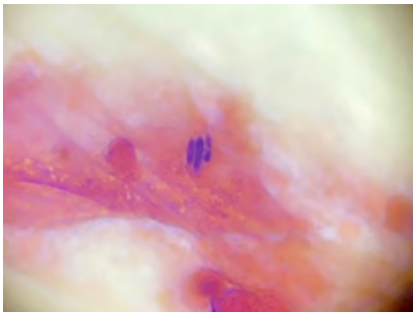

Figure 7:

Figure 8:

4. Results and Discussion

The patient started treatment with Itraconazole 200 mg daily with partial improvement, however, he did not return for follow-up consultation due to a change of residence (Figure 9,10). This case shows us the complexity of infectious diseases and the polymorphic forms that can occur. This gives rise to the need, at any level of care, to carry out studies that complement the diagnosis prior to the administration of treatments in order to avoid future complications that compromise the morbidity of our patients.

Figure 9:

Figure 10:

References

1. Mayorga-Rodríguez J, Mayorga-Garibaldi JL, Muñoz-Estrada VF. Sporotrichosis: series of 1,134 cases in an endemic area of Mexico. Med Cutan Iber Lat Am. 2019; 47(1): 24-28.

2. A García Vargas, J Mayorga, A. Soto Ortiz, JF Barba Gómez. Sporotrichosis in children. Study of 133 cases at the Dermatological Institute of Jalisco "Dr. José Barba Rubio." Med Cutan Iber Lat Am. 2008; 36: 18-22.

3. Rodrigues AM, Cruz Choappa R, Fernandes GF, de Hoog GS, de Camargo ZP. nov. (Ascomycota: Ophiostomatales), a soil-borne agent of human sporotrichosis with mild-pathogenic potential to mammals. Fungal Biol. 2016; 120 (2): 246-264.

4. Carrada-Bravo T. Sporotrichosis: recent advances in the Laboratory diagnosis, histopathology and epidemiology in Mexico. Rev Latinoam Patol Clin. 2012; 59 (3): 147-171.

5. White M, Adams L, Phan C, Erdag G, Totten M, Lee R. Disseminated sporotrichosis following iatrogenic immunosuppression for suspected pyoderma gangrenosum. Lancet Infect Dis. 2019; 19(11): e385-e391.