

Hot Tips: Public Health Advisory

#143 Date: 06/25/2024

Please copy and distribute to ALL physicians at your location.

Rare, Severe Dermatophyte Infection Associated with Sexual Contact Identified in the United States

Key Messages

- The California Department of Public Health (CDPH) has released a Health Alert to notify providers that the first known case of rare, severe dermatophyte infection associated with sexual contact has been identified in the United States this month. The case reported recent travel to California and Europe and contact with multiple sexual partners throughout their travels.
- The fungus *Trichophyton mentagrophytes, genotype VII (TMVII)* was identified as the pathogen responsible for the infection resulting in inflamed, painful, pruritic, and persistent skin lesions affecting anogenital and perioral areas.
- When presented with a rash that appears to be related to TMVII, physicians should also consider testing for other sexually transmitted infections (STI) such as mpox, syphilis, and herpes simplex virus (HSV).

Situation

Although rare, severe dermatophyte infections associated with TMVII have been previously implicated with an outbreak among men who have sex with men (MSM) in France in 2023 and have also been identified among returning travelers in European countries who have engaged in sex tourism throughout Southeast Asia. The patients have presented with erythematous skin lesions with active borders that were spread across the face, genital, and perianal areas. Papular, nodular, and erythematous-squamous circinate lesions have also been noted. High suspicion for TMVII is prompted for any patients with a similar clinical presentation, and initiation of empiric treatment is recommended. If suspected, it is recommended that a fungal culture of skin scrapings is performed to diagnose TMVII infection. Genetic sequencing and species identification can also be performed for fungal isolates by select laboratories.

Treatment of severe dermatophyte infections involves the use of terbinafine and -azoles. Topical antifungal regimens are often initiated to attempt treatment of these infections, but typically fail. Upon failure of topical regimens, empiric treatment with a daily 250 mg dose of oral terbinafine should be started and continued through the duration of infection. Infection may persist for up to 6 weeks or longer. If no clinical improvement is noted after 2-4 weeks of oral terbinafine administration, patients should be referred to a specialist and potentially switched to a 200 mg daily dose of oral Itraconazole. Other dermatophytes such as *Trichophyton indotineae* which have also been associated with sexually transmitted infection, are often resistant to terbinafine.

To prevent transmission or reinfection with a dermatophyte, patients should be advised as follows:

- Avoid skin-to-skin contact with affected areas.
- Avoid all sexual contact as long as the rash persists.
- Avoid sharing clothing and other personal items.
- Wash and dry clothing on high heat to eliminate fungal spores.
- Avoid the use of topical steroids.
- Continue prolonged therapy as directed by your physician to prevent relapse or reinfection.

Background

Although TMVII is a rare dermatophyte, dermatophytes consist of common fungi that lead to infections in the skin, hair, or nails, as they rely on keratin to grow and subsist. Various fungi of the *Trichophyton*, *Microsporum*, and *Epidermophyton* genera are considered dermatophytes. Common infections such as tinea pedis, tinea corporis, tinea capitis, and ringworm, result from exposure to these fungi. Similarly, an infection of the groin, proximal inner thighs, or buttocks—known as tinea cruris—can occur. Most of these common tinea infections can successfully be treated with first-line topical antifungals.

While appropriate oral antifungal treatment regimens are successful in treating severe dermatophyte infections, delayed diagnosis and treatment may lead to severe illness and hospitalizations. Awareness of the emergence of sexually transmitted dermatophyte infections, is crucial to ensuring timely diagnosis and treatment. Diagnosis of TMVII should also be accompanied with screening for other sexually transmitted infections to rule out coinfections and provide treatment for the patient and their partners as needed. In support of ongoing prevention efforts to reduce STI transmission, clinicians are also encouraged to assess for mpox vaccination status and offer vaccination to any eligible patients.

Any cases of sexually transmitted severe dermatophyte infections should be reported to Ventura County Public Health by calling (805) 981-5201.

Resources

[CDPH Health Advisory | Reports of Rare, Severe Dermatophyte Infections Associated with Sexual Contact in the United States](#)

[UpToDate | Dermatophyte \(tinea\) infections](#)

This bulletin is intended to improve the public health in our county by keeping physicians and nurses informed of noteworthy diagnoses, disease trends, and other events of medical interest. Another goal of a public health department is to educate. We hope that you will use this information to increase your awareness. Please allow us to continue in our role of speaking to the press so that we may maximize the educational message to the benefit of all citizens of Ventura County.