

TMVII Information for Providers

Trichophyton mentagrophytes genotype VII (TMVII) is an emerging cause of dermatophyte (tinea) infection spread through sexual contact, primarily amongst men who have sex with men (MSM). Lesions might be misdiagnosed as eczema, psoriasis, or folliculitis. Untreated infections can lead to further spread, bacterial superinfection, or scarring. TMVII often requires a prolonged course of treatment.

History

Ask about:

- Contact with a sexual partner with similar lesions or suspect/confirmed case of TMVII?
- Use of antifungal or steroid creams (OTC or prescription)?
- Engagement in group sex or sex work?
- Recent out-of-state travel?

Physical exam

- Look for round, well-demarcated, inflamed, erythematous plaques with overlying papules, pustules, and/or scale on face, trunk, genitals, buttocks, and extremities (panel A-C)
 - Lesions can be pruritic or painful
- Lesions might also have papulonodular appearance indicative of folliculitis (panel D)



Images courtesy of <u>Notes from the Field: Trichophyton</u> mentagrophytes Genotype VII

Diagnosis

- Take photos of lesions for medical record, if authorized by patient
- Obtain skin scrape:
 - Equipment: Alcohol wipe, gloves, scalpel or tongue depressor, sterile specimen container, patient label
 - PPE: Standard precautions (gloves)
 - Protocol: Clean skin with alcohol wipe and allow to dry, stretch skin, hold scalpel or tongue depressor perpendicular to lesion, scrape surface to remove overlying scale (sample border if possible), collect material in sterile specimen container, and attach patient label.
- Send specimen for fungal KOH/culture
 - KOH might be positive for septate hyphae
 - Culture might be positive for "fungus" or "dermatophyte" in about one to two weeks, species identification can take another week
 - If Trichophyton mentagrophytes is identified, send isolate to Wadsworth via MDH for genomic sequencing to confirm TMVII and antifungal susceptibility testing. Typical turnaround is about two to four weeks.
- Test for concurrent STIs such as chlamydia/gonorrhea, syphilis, HIV, etc.
- Use diagnosis codes for tinea corporis or cruris (no diagnosis code for tinea genitalis or TMVII)

Treatment

- Start empiric oral terbinafine 250 mg daily.
 Don't delay until confirmed.
 - Typical duration is about four to eight weeks
 - Obtain baseline and follow-up LFTs if patient has increased risk for hepatotoxicity (such as chronic hepatitis or heavy alcohol use)
 - Continue for two weeks beyond resolution of lesions to prevent recurrence as TMVII often persists in hair follicles, and relapse has occurred when treatment is stopped at visible healing. There might be residual hyperpigmentation that makes it challenging to determine resolution, but continuing oral therapy for approximately two weeks beyond symptom resolution (pain, pruritus) is advised to ensure complete cure.
- Can try topical terbinafine 1% cream for small or localized lesions. However, if hair follicles are involved, treatment with oral therapy is necessary to achieve adequate drug penetration and concentration.
- Oral itraconazole is an alternative (consult/refer to ID for dosing recommendations and safety monitoring)

Reporting

 Complete the MDH TMVII Reporting Form for suspected/confirmed TMVII.



Patient education

- TMVII spreads through skin-to-skin and sexual contact
- Avoid sharing personal items such as clothing, towels, bedding, razors, etc.
 - Linens can be laundered on high heat to kill fungal spores
- Pets can develop tinea and should be evaluated by a veterinarian if lesions are present
- Avoid resuming sexual activity until lesions have fully healed
 - If continuing to have sexual activity, cover lesions with bandages or clothing
- Notify sexual partners to seek care if lesions develop.
 - Exact incubation period isn't known.
 Median is about two to three weeks.

Resources

- Notes from the Field: Trichophyton mentagrophytes Genotype VII (www.cdc.gov/mmwr/volumes/73/wr/mm73 43a5.htm)
- Trichophyton mentagrophytes genotype VII and other emerging dermatophytes of concern (www.aad.org/member/clinicalquality/clinical-care/emergingdiseases/dermatophytes/other-emergingdermatophytes)

Minnesota Department of Health www.health.state.mn.us

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