Summary/key points on sexually transmitted ringworm infections

Two recent publications highlight dermatophyte infections (also called ringworm or tinea) as a potential cause of genital lesions spread during sexual contact.

- A <u>recent report in JAMA Dermatology</u> described a case of tinea genitalis (genital ringworm) in an immunocompetent man in New York City.
 - The infection was caused by *Trichophyton mentagrophytes* type VII (TMVII) and was likely acquired through sexual contact.
 - TMVII is an emerging fungus that may be spread during sex and can cause inflammatory, painful, pruritic, and persistent skin lesions, located on the genitals, buttocks, or face.
 - \circ $\;$ This paper highlighted the first TMVII case reported in the United States.
 - TMVII has been circulating in Europe for several years, with <u>most cases reported</u> among men who have sex with men (MSM). Some cases have also occurred among people who traveled to Southeast Asia for sex tourism.
 - <u>Current evidence</u> suggests that oral terbinafine is effective for TMVII infections, but some patients <u>may require itraconazole</u>.
- Another <u>recent report in *Emerging Infectious Diseases*</u> described a case of tinea genitalis in an immunocompetent woman in Pennsylvania.
 - The infection was caused by the dermatophyte fungus *Trichophyton indotineae* and was potentially acquired and spread through sexual contact.
 - The fungus was resistant to terbinafine (first-line antifungal), but the patient's infection improved with itraconazole.
 - Before antifungal-resistant infection was recognized, the patient experienced substantial diagnostic and treatment delays and received multiple ineffective treatments, including corticosteroids that worsened her infection.

Key points:

- Clinicians should be aware of dermatophyte infections as a potential cause of genital lesions.
- Clinicians should also be aware that visual inspection without diagnostic testing cannot reliably distinguish dermatophyte infections from other inflammatory skin conditions (e.g., contact dermatitis). Inappropriate use of corticosteroids can exacerbate dermatophyte infections.
- Diagnostic testing (e.g., with potassium hydroxide preparation) is important to correctly diagnose and appropriately treat fungal skin infections.
- Overall, these reports underscore the need for clinical vigilance, increased surveillance (such as through sexual health clinician networks) to identify emerging trends in severe and antifungal-resistant dermatophyte infections, studies to understand TMVII and *T. indotineae* transmission dynamics, and greater laboratory capacity to identify dermatophyte species and test for antifungal susceptibility.
- Clinicians can request consultation for challenging STD cases through the CDC-funded STD prevention training centers <u>STD Clinical Consultation Network</u>.
- Clinicians who suspect antifungal-resistant dermatophytosis or tinea genitalis due to TMVII can <u>contact their state and local health departments</u> for assistance. Public health officials concerned about potential cases of antifungal-resistant dermatophyte infections or unusual clusters of cases can email <u>FungalOutbreaks@cdc.gov</u> for assistance with recommendations and testing.