Case Report

Pubic Candida Folliculitis, A Case Report in a Patient With Recurrent Vaginal Candidiasis

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Abstract

Objective: Folliculitis is a skin infection and inflammation that develops in the hair follicles. While most cases of folliculitis are caused by bacterial infections, here is a case of folliculitis caused by the *Candida* fungi in an immunocompetent host.

Case report: A 23-year-old non-diabetic immunocompetent female with recurrent vaginal candidiasis developed clusters of erythematous, pruritic papules in the pubic area. Upon evaluation, the clusters were determined to be folliculitis. Risk factors for folliculitis included shaving of the pubic area, hot tub use, and wearing of tight, restrictive clothing. Cultures and skin samples of the folliculitis demonstrated *Candida albicans*. The patient was subsequently and successfully treated with clotrimazole solution and cream. There was no recurrence of the folliculitis upon her 3-month follow-up appointment.

Conclusion: Candida folliculitis is a rare condition in non-diabetic patients. The patient's history, risk factors and immune status assessment, and physical examination with proper diagnostic testing, are crucial steps in attaining the correct diagnosis.

Keywords: Fungi; Candida; Folliculitis; Inflammation; Exanthema

Introduction

Folliculitis is a common skin condition in which hair follicles become inflamed or infected and is usually caused by a bacterial or fungal infection (1-3). Folliculitis can cause small, erythematous pustules and tender, itchy skin around the scalp, mustache, beard, trunk, and pubis (2). The infection may spread and turn into non-healing, crusty sores or become a large swollen mass (2, 4). Although, the condition is benign, but it can be itchy, tender, and embarrassing (2). Severe infections can cause permanent hair loss and scarring. Mild cases usually clear in a few days with basic self-care measures.

Here we present a case of a 23-year-old female with a history of recurrent vaginal candidiasis who presents with folliculitis in the pubic area caused by a fungal (*Candida*) infection.

Case report

The patient is a 23-year-old female with a history of recurrent *Candida albicans* (*C. albicans*) vaginal colonization. She is immunocompetent and has experienced 4-5 episodes of *C. albicans* vaginal colonization per year, which were confirmed by culture. She presented to the outpatient gynecologic

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clinic for a follow-up appointment after her treatment for vaginal candidiasis with daily boric acid vaginal suppositories for 7 days.

Her vaginal symptoms, including white cottage cheese-like discharge, redness, and itching had resolved upon presentation; however, she noticed a cluster of small red bumps that looked like a shaving rash. The rash had become progressively more diffuse and pruritic. Additionally, the red bumps were becoming white with small blisters filled with pus. Moreover, the skin appeared erythematous, and the patient reported a burning sensation (Figure 1).

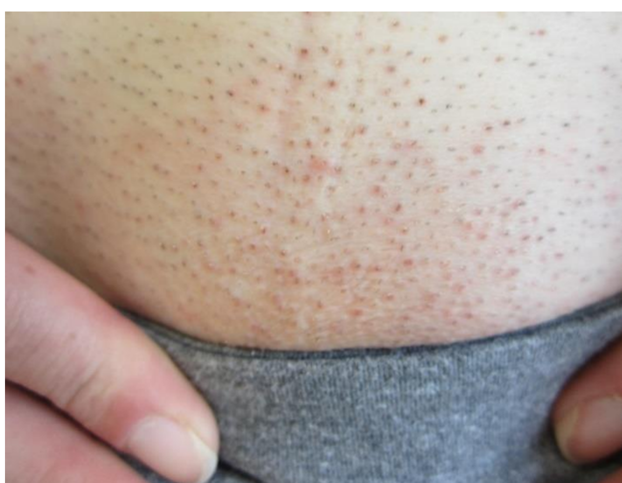

Figure 1: Picture of the area affected by candida infection. The area depicts a cluster of small red pimples with inflammation at the hair follicles, similar to a shaving rash, that progressively became more diffuse and itchy.

Risk factors: The patient had numerous risk factors for candida folliculitis, including repeated shaving with the same un-sanitized blade, using a friend's hot tub weekly, recurrent vaginal candidiasis, and wearing tight, restrictive yoga clothing that contributed to sweating and likely obstruction of her pubic sweat glands.

Diagnosis: Three cultures were performed and confirmed *C. albicans* as the cause of the folliculitis. A scraped skin sample verified the same etiology, thereby excluding bacterial folliculitis and pseudo-folliculitis barbae.

Treatment: The patient received topical therapy with clotrimazole solution followed by clotrimazole cream for three weeks.

Follow-up: The patient recovered completely with no recurrence at the three month follow-up appointment.

Discussion

Folliculitis is most commonly caused by an infection of hair follicles with *Staphylococcus aureus* (staph) bacteria (5). Folliculitis may also be caused by a virus, fungi (*Candida*), and even inflammation from ingrown hairs (6). Folliculitis can occur in any part of the body except palms, soles, lips and mucous membranes. Major risk factors for folliculitis are medical conditions that reduce resistance to infection, diabetes mellitus, cancer including chronic leukemia, and/or immunosuppression like HIV/AIDS. Other risk factors include acne, dermatitis, topical steroids medications, and long-term antibiotic therapy for acne as well as frequent shaving, regularly wearing clothing that traps heat and sweat, un-sanitized hot tubs, waxing and wearing tight clothing (1, 2, 7). Risk for folliculitis can be reduced by simply avoiding the previously mentioned risks and considering the use of hair-removing products or other methods of hair removal (1, 2). Possible complications include recurrent or spreading infection, furunculosis, scarring or dark spots, destruction of hair follicles, and permanent hair loss (1).

Candida folliculitis is a rare pustular or papular rash that can affect the scalp, mustache, beard, trunk, and pubis (6). While fungal folliculitis is most commonly caused by Malassezia or Pityrosporum species, other sources include *C. albicans* and dermatophytes (5, 7, 8). Fungal folliculitis may be misdiagnosed as tinea barbae, keratosis pilaris, acne, impetigo contagiosa, pustular psoriasis variants, inflamed mollusca contagiosa, or insect bites (2). Once diagnosed with potassium hydroxide preparation, fungal culture, or skin biopsy, candida folliculitis is treated with oral antifungals (7). The first-line treatment for localized infection is oral fluconazole 150 mg weekly for 2-4 weeks or 50 mg daily for 4 weeks; topical antifungal solutions or creams can also be used (1, 2). This patient was treated promptly and successfully with topical clotrimazole

The risk of folliculitis is actively reduced by avoiding tight clothes, shaving with care, considering hair-removing products or other methods of hair removal, and carefully choosing hot tubs and heated pools.

Conclusion

Candida folliculitis is a rare condition in non-diabetic immunocompetent patients. The patient's history, risk factors, immune status assessment and physical

examination with proper diagnostic testing are crucial steps in attaining the correct diagnosis.

Conflict of Interests

Authors have no conflict of interests.

Acknowledgments

None.

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