Histopathologic evaluation of scrotal skin biopsy supporting the diagnosis of Bechet’s disease

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A B S T R A C T
Bechet’s disease is a multisystemic inflammatory disease of unknown causes, characterized by painful oral and genital ulcers, eye involvement, and other systemic manifestations. Bechet’s disease is a clinical diagnosis with no specific laboratory test and rarely encountered in urological practices. Here, we are reporting a case of Bechet’s disease in a patient who presented with painful scrotal ulcers underwent examination under anesthesia to rule out scrotal abscess and histopathology evaluation of scrotal skin biopsy supporting the diagnosis of Bechet’s disease.

1. Introduction
Bechet’s disease is chronic, relapsing, inflammatory multisystem disease due to vasculitis of unknown etiology, usually occurring in the third and fourth decade of life with an equal male to female ratio.

Bechet’s disease patient can present with different manifestations most commonly mucocutaneous and genital ulcers along with eye disease, or others like central nervous system disease, arthritis, frank vasculitis, or thrombophlebitis.

Bechet’s disease is a clinical diagnosis with no specific pathognomonic confirmatory testing.

2. Case report
A 33-year-old male, not known to have any chronic medical illness presented to urology clinic with recurrent painful genital ulceration over the last year. The condition was preceded by a history of recurrent painful oral ulceration for two years, visual disturbance for 3 months, and a history of amnesia episodes noticed by his brother during the last 6 months.

The patient complains of painful scrotal pustules a few raptures 2 weeks before presentation. The patient had previous penile lacerations which resolved spontaneously. The patient denies any history of lower urinary tract symptoms, sexually transmitted disease, or previous scrotal surgeries.

Physical examination revealed normal vital signs, conscious, alert but poorly concentrated. He has multiple non-tender puscles over the chest, back, and scalp. Oral examination revealed multiple tender ulcers with patches of thrush. Urogenital examination showed multiple and severely tender multiple scrotal ulcers occupying the inferior border of the scrotum. The rest of the physical examination was unremarkable.

His blood test showed mild leukocytosis (WBC: 12.9 × 103/μl), increased erythrocyte sedimentation rate (50 mm/h), increased C-reactive protein (219 mg/l), and increased procalcitonin (0.17 μm/L), HIV Ag/Ab COMBO was non-reactive, HIV western blot was within normal. Scrotal ulcer swab showed growth of Klebsiella pneumonia.

Due to the severity of scrotal tenderness, the proper examination couldn’t be achieved, and a scrotal abscess couldn’t be ruled out, so the patient was admitted, started on a broad-spectrum antibiotic, and underwented proper examination under general anesthesia which revealed dry scrotal ulcer with no induration, fluctuation, palpable collection or crepitation. A scrotal biopsy was taken. Histopathology findings showed mixed dermal inflammatory infiltrate with ulceration, thrombi formation, and folliculitis (Fig. 1). Vasculitis, spongiosis, and basal keratinocytes vacuolization (Fig. 2) which is suggestive of Bechet’s disease. Ophthalmologists were consulted and slit-lamp examination showed papilledema with no signs of uveitis. Eventually, the patient was referred to rheumatology and started on intravenous injections of steroids, His condition improved significantly, and discharged on day 11.

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3. Discussion

Bechet’s disease is a chronic, multisystemic inflammatory disease of unknown pathogenesis with an unpredictable episode of recurrence. Usually occur in the third and fourth decade of life with an equal male to female ratio. It’s known with geographic variation, highest along the Silk rout and Mediterranean countries. The prevalence rate in the Middle East ranging 17–80/100 000(2).

Bechet’s disease patient can present with an ocular lesion, oral or genital aphthosis, skin lesion, central nervous system involvement, or vascular manifestation(3). Genital ulcers are reported to affect 80–90% of patients with Bechet’s disease. It can occur in different genital locations but, most commonly affecting the scrotum in males and uvula in females, characterized by grey to yellow base covered with eschar or an exudative slough surrounded by a prominent margin usually heal spontaneously forming a scar. Painful oral aphthosis occur in 97% or more, skin lesions occur approximately in 80%, eye lesion involvement is around 50%. Although Bechet’s disease is a clinical diagnosis based on the international criteria of Bechet’s disease (ICBD), our patient was diagnosed with Bechet’s disease and histopathological evaluation of scrotal skin biopsy which was taken during genital examination under general anesthesia supporting our diagnosis. Bechet’s disease may need to be considered in a patient with a scrotal ulcer and biopsy can be used as a supporting tool during evaluation.

4. Conclusion

Bechet’s disease is multisystemic vasculitis with varying presenting symptoms. It is a clinical diagnosis and not commonly encountered in urological practice. The urologist may need to be aware of Bechet’s disease during the assessment of the patient with acute scrotum associated with genital ulcers. Scrotal biopsy and histopathological evaluation are helpful tools to support the diagnosis of Bechet’s disease.

Consent

Written informed consent was obtained from the patient for publication of this case report and accompanying images.

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Declaration of competing interest

The authors declare that there are no conflicts of interest regarding the publication of this paper.

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