Erectile Dysfunction in Behcet’s Disease

Neenu Kaul, Ashwani Bhat¹, Rajwinder Singh, Inderpal Singh

From the Departments of Dermatology, Venereology and Leprology and ¹Medicine, Maharishi Markandeshwar Medical College and Hospital, Solan, Himachal Pradesh, India.
E-mail: shuhulmasti@gmail.com

Indian J Dermatol 2017;62(2):217-219

Sir,
Behcet’s disease (BD) is a unique systemic vasculitis of unknown etiology, which may affect both veins and arteries of different sizes and localization.¹ The
exact etiology of BD is unknown; both genetic and environmental factors are thought to play a role in its pathogenesis. BD has been regarded as a Th1 type autoimmune disease, because of the association with human leukocyte antigen-B51 and hyperreactivity against streptococcal antigen.[2-4] BD usually presents with recurrent oral aphthae, genital ulcer, cutaneous manifestations, and uveitis.[2-4] It can be accompanied by neurological, intestinal, urogenital, and cardiopulmonary symptoms in addition to the above mentioned.[7] Erectile dysfunction may be expected to occur during its course.

A 22-year-old nonsmoker, nondiabetic, and normotensive male patient presented to skin outpatient department with chief complaints of recurrent oral ulcerations since he was 12 years old; there were 2–3 episodes of oral ulcerations occurring over each month in a year, associated with burning sensation, remaining there for 10–14 days and healing without significant scarring. There was history of arthralgia in both large and small peripheral joints for the last 8 years along with the history of failure to achieve erection, low mood, and loss of interest in daily activities since 1 year. The eye complaints in the form of redness, pain, and photophobia were present for the last 3 months. There was no history of any genital ulceration, skin lesions, gastrointestinal symptoms, neurological symptoms, or any other systemic complaints at the time of presentation. There was no history of any drug intake excepting tablet paracetamol 650 mg occasionally for joint pains. There was no history of any drug abuse.

Mucosal examination revealed multiple major aphthae along the lateral borders of the tongue. Genital mucosa did not show any active lesion or scar from previous lesions. Cutaneous examination did not reveal any significant skin lesion associated with the disease. Ophthalmological examination revealed anterior uveitis in the right eye and left eye showed some corneal opacities probably from some viral infection contracted during past. Sexual function was assessed by means of International Index of Erectile Function (IIEF) scoring system which revealed erectile dysfunction in the patient. Neurological examination was normal. Hamilton Anxiety and Depression Scale revealed that patient had moderate degree of depression and anxiety disorder.

Laboratory investigations revealed only raised erythrocyte sedimentation rate (35 mm/1st h). Rest of the investigations such as complete blood count, serum glucose levels, lipid profile, liver function test, renal function test, uric acid, venereal disease research laboratory, antinuclear antibody, and rheumatoid factor were normal. Endocrinological tests including free and total testosterone, oestradiol, prolactin, cortisol, adrenocorticotropic hormone, and gonadotropins were also normal. Viral markers such as human immunodeficiency virus, hepatitis B surface antigen, and anti-hepatitis C virus were nonreactive. Urine examination was normal. Mantoux test done with 5 units of purified protein derivative was negative. Pathergy test was performed with a disposable 26-gauge needle prick (needle held for 90 s in the dermis) at the flexor aspect of left forearm, approximately 2 inches below the elbow crease and read at 48 h to reveal 1 mm papule, which remained as papule over the next 24–48 h and disappeared completely in next 3 weeks.

Radiological evaluation was normal and included penile color Doppler ultrasonography to reveal any vascular abnormality as cause of erectile dysfunction in the patient, X-ray of the chest and clinically involved joints, and computed tomography scan head and spine.

Thus, a diagnosis of BD was made as per the International Study Group Classification Criteria [Table 1] for the diagnosis of BD, associated with erectile dysfunction and depression as depicted by IIEF scoring system and Hamilton Anxiety and Depression Scale, respectively.

In the literature, we could find only a single study by Erdogru et al., investigating the prevalence of erectile dysfunction with neurological involvement. They found erectile dysfunction in 14 of 24 (63%) patients with neuro–Behcet’s disease.[8] Interestingly, Aksu et al. reported two cases of BD without neurological findings, but with erectile dysfunction. The authors argued that erectile dysfunction of their patients was most likely attributable to venous leak.[9] Hiz et al. suggested that BD has a negative impact on men’s psychological state and sexual function and recommended that depression and sexual dysfunction

---

**Table 1: International Study Group Classification Criteria (major criteria and minor criteria required)**

| Major criteria |
|----------------|
| Recurrent oral ulcerations: Minor aphthous, major aphthous, or herpetiform ulcerations observed by physician or patient, which recurred at least three times in one 12-month period |

| Minor criteria |
|----------------|
| Recurrent genital ulceration: Aphthous ulceration or scarring observed by physician or patient |
| Eye lesion: Anterior uveitis, posterior uveitis, or cells in vitreous on slit-lamp examination or retinal vasculitis observed by ophthalmologist |
| Skin lesions: Erythema nodosum observed by physician or patient, pseudofolliculitis or papulopustular lesions, or acneiform nodules observed by physician in postadolescent patients not on corticosteroid treatment |
| Positive pathergy test read by physician 24–48 h |
be investigated and treated while assessing patients with BD.\(^{[12]}\) de Oliveira Ribeiro et al. in their review article clearly showed that depression is a source of stress in BD patients' lives, leading to changes in the activity cycles and remissions of the disease, increased number of symptoms in patients, lower scores on memory tests and adaptation, lower quality of life, and changes in the sexual lives of both female and male patients.\(^{[13]}\)

Yetkin et al., in their study on 25 sexually active premenopausal female patients with mucocutaneous BD, concluded that depression and female sexual dysfunction were more common in patients with BD than in the healthy individuals.\(^{[12]}\)

Our case of young male with BD had also depression and erectile dysfunction without any significant drug history, neurological or local vascular involvement. Depression is frequently associated with sexual dysfunction. It is also known that mood disorder caused by chronic diseases can cause erectile dysfunction.

We concluded that erectile dysfunction in BD may be expected even in the absence of neurological and vasculogenic cause. Depression should be kept in mind as a treatable cause of erectile dysfunction in BD.

**Financial support and sponsorship**

Nil.

**Conflicts of interest**

There are no conflicts of interest.

**References**

1. CurYazici Y, Yurdakul S, Yazici H. Behçet's syndrome. Curr Rheumatol Rep 2010;12:429-35.
2. Pande I, Uppal SS, Kaithash S, Kumar A, Malaviya AN. Behçet's disease in India: A clinical, immunological, immunogenetic and outcome study. Br J Rheumatol 1995;34:825-30.
3. Sachdev N, Kapali N, Singh R, Gupta V, Gupta A. Spectrum of Behçet's disease in the Indian population. Int Ophthalmol 2009;29:495-501.
4. Arulrajamurugan PS, Rajendran CP, Ravichandra R, Parthiban M, Rajeswari S, Rukmanatharajan S, et al. Clinical profile of patients with Behçet's disease. J Indian Rheumatol Assoc 2005;13:135-7.
5. Singh RR, Malaviya AN. Behçet's syndrome in north India. J Assoc Physicians India 1988;36:238.
6. Kunjuraman G, Joseph FP, Philip J. Behçet's syndrome: A report of 3 cases with review of literature. J Assoc Physicians India 1980;28:195-8.
7. Alpsoy E. Behçet's disease. A comprehensive review with a focus on epidemiology, etiology and clinical features, and management of mucocutaneous lesions. J Dermatol 2016;43:620-32.
8. Ergoogu T, Koçak T, Serdaroglu F, Kadioglu A, Tellaloglu S. Evaluation and therapeutic approaches of voiding and erectile dysfunction in neurological Behçet's syndrome. J Urol 1999;162:147-53.
9. Aksu E, Keser G, Günaydın G, Özbeş SS, Colakoglu Z, Gümüşdis G, et al. Erectile dysfunction in Behçet's disease without neurological involvement: Two case reports. Rheumatology (Oxford) 2000;39:1429-31.
10. Hiz O, Ediz L, Gülçi E, Tekeoglu I. Effects of Behçet’s disease on sexual function and psychological status of male patients. J Sex Med 2011;8:1426-33.
11. de Oliveira Ribeiro NP, de Mello Schier AR, Pessoa TM, Pereira VM, Machado S, Arias-Carrón O, et al. Depression as a comorbidity in Behçet's syndrome. CNS Neurol Disord Drug Targets 2014;13:1041-8.
12. Yetkin DO, Cölik O, Hateni G, Kadioglu P. Sexual dysfunction and depression in premenopausal women with mucocutaneous Behçet's disease. Int J Rheum Dis 2013;16:463-8.