CASE REPORT

Multifocal Venous Thrombosis in Behcet's Disease

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ABSTRACT

Behcet's disease is a multisystem inflammatory vascular disorder with a chronic course characterized by recurrent oral and genital ulcers, eye lesion, arthritis and skin lesions. It has a typically waxing and waning course. The cause and pathogenesis of the disease are unclear and specific treatment is not available. A 39 years old man presented with rash, ocular manifestation and left leg swelling. He was found to have deep venous thrombosis of left leg along with recurrent cerebral venous thrombosis. He was a known case of Behcet's disease since 3 years and had been on anticoagulants since then.

Key words: *Behcet's disease. Venous thrombosis. Ulcer.*

INTRODUCTION

Behcet's disease is a multi-system inflammatory disorder with a chronic relapsing course. It is prevalent along the ancient Silk Route.[1] There are no pathognomonic laboratory tests and the diagnosis requires recurrent oral ulceration accompanied by two of the following: genital ulceration, ocular disease, skin lesions or a positive skin pathergy reaction.[2,3] Despite the inclusive criteria set forth by the International Study Group, there are cases where the criteria cannot be met and a diagnosis is missed. It usually affects young adults 20 – 40 years of age.[4,5]

We report, to the best of our knowledge, the first case from Pakistan regarding an aggressive case of Behcet's disease in a 39 years old man, with ocular manifestation and venous thrombosis at multiple sites despite being on anticoagulants.

CASE REPORT

A 39 years old man presented to the clinic with rash on the body for 3 days. He complained of low grade intermittent fever and left leg swelling since 4 – 5 days. He was unable to swallow due to painful mouth ulcers and hence was admitted. He was diagnosed to have Behcet's disease 3 years ago and had been on warfarin. In previous magnetic resonance imaging (MRI) and magnetic resonance venography (MRV) repeated few months after cerebral venous thrombosis superior sagittal sinus was not clearly visualized in its posterior part, with significantly increased vascularity noted in the near vicinity of superior sagittal sinus. Features were suggestive of partial re-canalization of superior sagittal sinus following thrombosis (Figure 1). Magnetic resonance arteriography (MRA) images were unremarkable. He developed recurrent mouth ulcers progressively increasing in frequency with > 3 episodes in a year. He was also treated with steroids during this time. He gave a history of cigarette smoking 4 – 8/day. Patient denied photosensitivity, alopecia, weight loss and alcohol intake.

On examination, he was a lethargic man of good built, afebrile with a blood pressure of 135/89 mmHg, pulse rate 101 beats/minute and respiratory rate 19 breaths/minute. There were multiple papulo-pustular 1 – 2 cm lesions resembling acne on face, back, chest, groin and

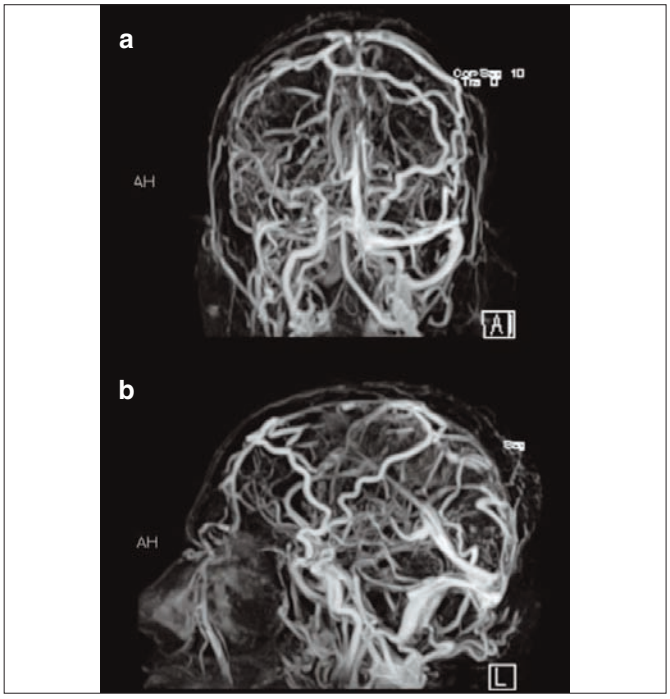

Figure 1: Brain magnetic resonance venography (MRV) scan of our patient with evident cerebral venous thrombosis on coronal and sagittal views: In both MRV images, superior sagittal sinus is not clearly visualized with significantly increased vascularity seen in near vicinity of superior sagittal sinus. Imaging features are suggestive of partial re-canalization of superior sagittal sinus following thrombosis.

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Table I: Laboratory investigations after admission.

Laboratory parameter	Result	Laboratory parameter	Result
Hemoglobin (gm/dl)	14.9	Calcium (mg/dl)	9
Mean cell volume (FL)	82.7	PT (seconds)	13.8
White blood cell count (x10E9/L)	16.4	PT control (seconds)	11
Neutrophil (%)	80.7%	INR	1.31
Lymphocytes (%)	6.9%	APTT (seconds)	26%
Eosinophils (%)	0.1%	APTT control (seconds)	30%
Monocytes (%)	12.2%	Total Bilirubin (mg/dl)	0.8%
Basophils (%)	0.1%	Serum glutamic pyruvic transaminase (IU/L)	66%
Platelets count (/µL)	307	Serum albumin (g/dl)	3.1
Blood Urea Nitogen (mg/dl)	18	C-reactive protein (mg/dl)	10.6
Creatinine (mg/dl)	1.0	Erythrocyte sedimentation rate (mm/hr)	49
Sodium (mmol/L)	135	Lactate dehydrogenase (IU/L)	969
Potassium (mmol/L)	4.7	Malarial parasite	Not seen on peripheral film
Chloride (mmol/L)	104	ICT malaria	Negative
Bicarbonate (mmol/L)	19.3	Blood culture	No growth
Phosphate (mg/dl)	3.9	Urine detail report	Trace proteins and ketones

ANA, ASMA and AMA were negative

Abbreviations:
PT = Prothrombin time; INR = International normalized ratio; APTT = Activated partial thromboplastin time; ANA = Antinuclear antibody; ASMA = Anti smooth muscle antibody; AMA = Anti mitochondrial antibody.

medial aspect of thighs and few were on the scrotum too. Oral thrush with multiple apthous ulcers upto the tonsillar pillars was seen. Left leg was swollen, red and tender. His vision was blurred and was unable to read or tell time. Fundoscopy revealed optic disc swelling in right eye and macular oedema in left eye. At the site of the cannula insertion a 2.5 mm erythematous papule was noticed on the forearm. Systemic examination was unremarkable.

Laboratory investigations are shown in Table I. Chest X-ray was unremarkable. On Doppler ultrasound of left leg the left external iliac, common femoral, superficial femoral and popliteal veins appeared non-compressible, distended and demonstrated no color filling or spectral wave formation. Behcet's Disease was confirmed as per International Study Group (ISG) Criteria 1990.[1] There was evidence of venous thrombosis at multiple sites (cerebral venous thrombosis and deep vein thrombosis of left leg veins) along with disease relapse.

Enoxaparin 60 mg twice daily was overlapped with warfarin 10 mg per day. Warfarin was gradually tapered to 5 mg and continued on 5 mg daily at discharge. The prothrombin time and international normalized ratio (INR) monitoring showed subsequent INR to be therapeutic 2.5 – 2.7. He was managed with antifungal agents for his oral ulcers, and intravenous hydrocortisone for the disease relapse. His pustules started to subside and no new eruptions were noticed during his hospital stay. Azathioprine was also started on the second day of admission as a steroid sparing agent. Ophthalmology consult was sought and decreased intraocular pressure in right eye and uveitis in the left eye was affirmed. He was advised YAG laser and intraretinal avastin for his left eye. A rheumatology consult was taken and patient was offered infliximab to salvage his vision. Patient refused to have treatment for his vision and was discharged home.

DISCUSSION

We report this case of Behcet's disease with extensive deep venous thrombosis along with thrombosis of the cortical venous sinuses, a rare manifestation of this disease from our part of the world. Arterial and venous involvement is one of the characteristics of Behcet's disease. Vascular involvement was seen in 8.3% cases in Iran while 16.8% and 18% cases have been reported from Turkey and Saudi Arabia respectively.[6-8] Studies report a fourteen-fold increase risk of venous thrombosis in Behcet's patients.[9] Venous involvement is common in men especially those with ocular involvement and a positive pathergy test.[10]

It is observed that men are more likely affected by Behcet's disease. Age and gender distribution in India shows a male to female ratio of 1.8 and the age of onset is 33 years. These findings are corroborated in the presently reported case and conforms to the data available from the rest of the world. However the clinical presentation reported from India shows involvement of oral and apthous ulceration followed by joint and skin involvement as opposed to clinical symptoms reported from China and Iran where there was no significant joint involvement.[11]

To conclude, ocular and cerebrovascular thrombosis are important complications of Behcet's disease. These can occur despite preemptive anticoagulation as provided in the present case. Hence, there is a need for regular follow-up of such cases.

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