

Common Femoral Vein Thickness Measurement as a diagnostic test in Incomplete Behçet's Disease

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Background/Objectives

- Behçet's disease (BD) is characterized by recurrent oral and/or genital aphthous ulcers accompanied by cutaneous, ocular, articular, gastrointestinal, and central nervous system lesions.
- Diagnosing BD can be a clinical challenge in patients presenting with a limited number of organ manifestations, especially with single major organ involvement.
- We reported the first controlled Doppler ultrasound study showing increased common femoral vein (CFV) thickness in BD.
- We recently also showed that increased CFV thickness is a distinctive feature of BD, rarely present in other inflammatory or vascular diseases such as ankylosing spondylitis, systemic vasculitides, venous insufficiency, and non-inflammatory DVT with a specificity higher than 80% for the cut-off value of ≥ 0.5 mm.
- We suggest that CFV thickness measurement is an easy, non-invasive diagnostic test for BD.
- In this study, we aimed to assess the diagnostic performance of CFV thickness measurement in patients with 'Incomplete' BD diagnosed by expert opinion.

Methods

- We included 28 patients with incomplete BD (15 male, 12 female) diagnosed with expert opinion and followed in the Marmara University Behçet's Clinic.
- Demographic, clinical characteristics and treatment data were recorded during routine visits.
- Common femoral vein wall thickness was measured by an experienced radiologist on the same day.

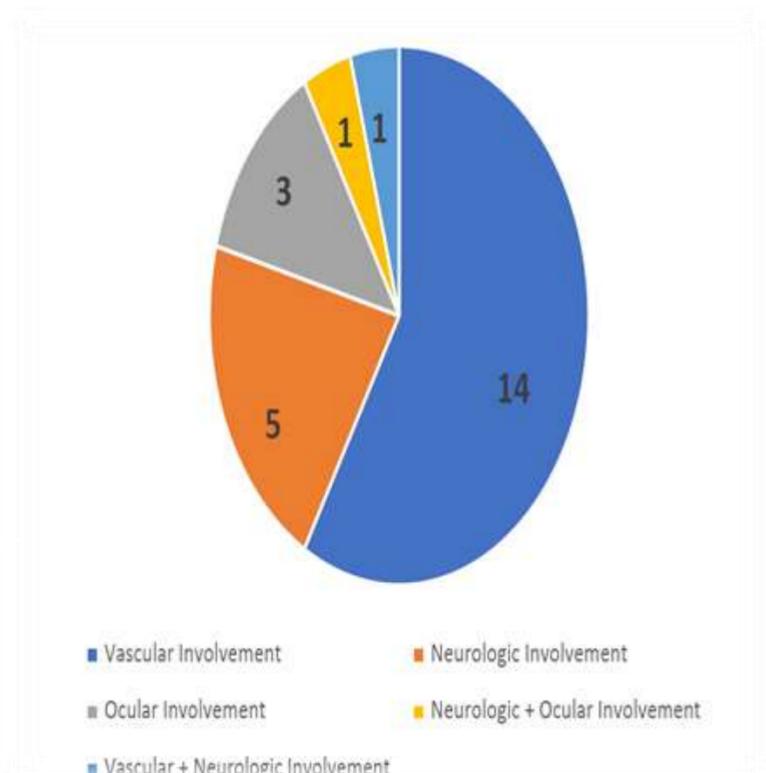
Table 1: Clinical characteristics and demographics of incomplete BD patients

Age, median (IQR)	34.4 (23.4-47.5)
Disease duration, median (IQR)	2 (0-16)
Mucocutaneous involvement, n (%)	4 (14.3%)
Oral ulcers, n (%)	22 (78.6%)
Genital ulcers, n (%)	6 (21.6%)
Papulopustular lesions, n (%)	4 (14.3%)
Major organ involvement, n (%)	24 (85.7%)
Pathergy positivity, n (%)	5 (17.9%)
Familial BD, n (%)	10 (35.7%)

Results

- Clinical characteristics and demographics were shown in Table 1.
- Four patients were newly diagnosed.
- The distribution of major organ involvements were given in Figure 1.
- All patients except 2 (4.2%), had CFV thickness values above the cut-off value of ≥ 0.5 mm.
 - Right CFV thickness was 0.71 (0.3-1.3) mm
 - Left CFV thickness was 0.72 (0.4-1.2) mm.
- Bilateral femoral vein thicknesses were similar in patients with and without a history of familial BD.

Figure 1: Distribution of major organ involvements in study group



Conclusion

- Diagnosing BD can be challenging in patients presenting with one major organ involvement such as oral ulcers and posterior uveitis, brain-stem disease or arterial aneurysms,
 - especially in countries with a low prevalence.
- These patients are generally diagnosed as 'incomplete' BD by 'expert opinion'.
- Early diagnosis is of utmost importance in some of these cases, especially with venous thrombosis as their management differs from non-inflammatory venous thrombosis, necessitating immunosuppressive use rather than anticoagulant therapy.
- Our results show that CFV thickness measurement with Doppler US,
 - A non-invasive, fast, and cost-effective radiological modality,
 - A valuable diagnostic test in incomplete BD,
 - especially with major organ involvement.