# WHICH FACTORS PREDICTS RECURRENT VASCULAR INVOLVEMENT IN BEHCET'S DISEASE?

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**Introduction:** Behcet disease (BD) is a multisystemic autoimmune disease which classified among vasculitis. Vascular involvement associated with morbidity and mortality and follow a relapsing pattern. We aimed to evaluate the clinical and laboratory features which can predict relapse of vascular involvement in BD.

**Methods**: In this retrospective study, medical records of 23 BD patients who have had recurrent vascular involvement (cases) were reviewed. All patients fulfilled the diagnostic criteria of ICBD. Data regarding 6 months and 3 month before vascular relapse and at the time of vascular relapse were recorded. 23 BD patients with vascular involvement and at least 5 years follow up but without relapse of vascular involvement was considered as control group. Data were compared between two groups to identify the contributing factors.

**Results:** Among BD patients with recurrent vascular involvement, mean age was 29.00+9.17 years, and 78% of them was male and most of them was Turk. Oral aphthosis was the most common first presentations. According to physician global assessment the disease activity at the disease onset was moderate in 43.5% and severe in 22% of them. The mean time between diagnosis and vascular involvement was 4.86+3.55 years, and mean time between first vascular involvement and recurrent vascular involvement was 4.18+2.48 years. Type of vascular involvement was venous thrombosis in 19 patients, arterial thrombosis in 1 case, and arterial aneurysm in 4 patients. In recurrent vascular involvement, venous thrombosis in 21 patients, arterial thrombosis in 1 case, and arterial aneurysm in 1 patients was seen. About the number of vascular relapse, 4 patients had 1 relapse, 12 patients had 2 relapse, 5 patients had 3 relapse and 2 patients had 4 relapse. Disease activity at 6 months, 3 months and at the time of relapse time was moderate to severe in 78% , 74 and 58% respectively. Disease manifestations at the relapse time was OA in 96%, GA in 56%, mucocutaneous in 56.5%, eye in 22% and joint in 13%. High ESR at 6 months, 3 months and at the time of vascular relapse was see in 52%, 52% and 67% respectively (p < .0001). High CRP at 6 months, 3 months and at the time of vascular relapse was see in 43%, 36% and 50% respectively (p= 0.109). 6 months before vascular relapse, discontinuation of steroid and cytotoxic was seen in 5 and 7 patients respectively. At the time of vascular relapse, 34% was on low dose steroid, 4% on Cyclophosphamide, 19% on Azathioprine, 9% on low dose MTX, 36% on colchicine and 82% was on warfarin. Comparison of cases and controls showed no significant differences in age, sex, ethnicity, type of vascular involvement, first presentation, clinical manifestations during course of disease, disease activity at the disease onset, and time between disease onset and vascular involvement.

**Conclusion:** Disease activity and high ESR are risk factors of vascular relapse in BD patients with history of vascular involvement, so proper treatment is necessary for prevention of vascular relapse.