
Behcet's syndrome – A bird's eye view of the recent literature

Edited by V. Hamuryudan and H. Yazici

Authors: Yurdakul S, Hamuryudan V, Yazici H.
Title: Behçet's syndrome.
Curr Opin Rheumatol 2004; 16: 38-42.
Summary: A recent review on Behçet's syndrome (BS).

Pathogenesis

Authors: Lee KH, Chung HS, Kim HS *et al.*
Title: Human alpha-enolase from endothelial cells as a target antigen of anti-endothelial cell antibody in Behçet's disease.
Arthritis Rheum 2003; 48: 2025-35.
Summary: Eighteen of 40 BS patients had IgM antiendothelial cell antibodies (AECA) that mostly were directed to α -enolase in the vascular wall. When supported with further specificity studies α -enolase might become a promising marker for the pathogenesis BS.

Authors: Duymaz-Tozkir J, Gül A, Uyar FA, Özbek U, Saruhan-Direskeneli G.
Title: Tumour necrosis factor alpha gene promoter region -308 and -376 G Apolymorphisms in Behçet's disease.
Clin Exp Rheumatol 2003; 21 (Suppl. 30): S15-8.
Summary: This study failed to show an association between TNF α -308 and -376 polymorphisms and BS. According to the authors the reported overexpression of TNF α in BS might be caused by other regulatory mechanisms.

Authors: Atagündüz P, Ergun T, Direskeneli H.
Title: MEFV mutations are increased in Behçet's disease (BD) and are associated with vascular involvement.
Clin Exp Rheumatol 2003; 21 (Suppl. 30) S35-7.
Summary: This study looked at the presence of 3 FMF related MEFV mutations among 57 BS patients who had no FMF like symptoms and 186 controls consisting of healthy people or patients with cardiovascular, pulmonary, metabolic or renal disorders. MEFV mutation was found to be significantly more frequent among BS patients compared to controls (26% vs 9%; $p = 0.003$). M694V was the dominant type and all patients but one were heterozygous for MEFV mutations. MEFV mutations were significantly more frequent among patients with vascular involvement (11 of 20 patients; 55%) compared to 4 of 37 patients (11%) without vascular involvement ($p=0.001$). This study lacked controls composed of FMF patients and patients with other inflammatory diseases.

Authors: Sakamoto H, Sakamoto T, Kubota T *et al.*
Title: Interleukin -8 expressed in the granulocytes of the eye in a patient with Behçet's disease complicated by lens induced endophthalmitis.
Jpn J Ophthalmol 2003; 47: 548-50.
Summary: One eye of a 40 year old man with Behçet's disease had to be enucleated as a result of severe uveitis causing loss of

sight and persistent uveitis. A thick fibrous membrane on both surfaces of the lens and multinuclear giant cells around the disrupted basement membrane of the lens were suggestive of lens induced uveitis. Mononuclear cells were mostly CD3 positive. Staining for IL-8 was shown in the granulocytes but not in multinuclear giant cells and mononuclear cells.

Authors: Silingardi M, Salvarani C, Boiardi L *et al.*
Title: Factor V Leiden and prothrombin gene G20210A mutations in Italian patients with Behçet's disease and deep vein thrombosis.
Arthritis Rheum 2004; 51: 177-83.
Summary: Factor V Leiden and prothrombin gene G20210A mutations are known to increase the risk of venous thrombosis but data on their role in the pathogenesis of Behçet's disease are conflicting. In this study, 27 of 118 consecutive Italian Behçet's disease developed deep vein thrombosis during a follow-up of 3 years. There were no significant demographic and clinical differences between patients with and without deep vein thrombosis. The allele and genotype frequencies as well as the carriage rate frequencies of factor V gene G1691A and prothrombin gene G20210A polymorphisms of the patients were not different from the controls consisting of healthy Italian blood donors. An interesting finding of this study was the association between prothrombin gene G20210A mutation and ocular involvement.

Clinical aspects

Authors: Gilworth G, Chamberlain MA, Bhakta B, Haskard D, Silman A, Tenant A.
Title: Development of the BD-QoL: A quality of life measure specific to Behçet's disease.
J Rheumatol 2004; 31: 931-7.
Summary: This is an interesting report of developing a QoL index among English patients with Behçet's disease using Rasch analysis, a method thought by some to be the most suitable for this sort of data handling. To the uninitiated – including the editors – it is difficult to understand how specificity is achieved without diseased controls. The fact that the manuscript does not include the index developed is another issue.

Authors: Mumcu G, Ergun T, Inanc N *et al.*
Title: Oral health is impaired in Behçet's disease and is associated with disease severity.
Rheumatology (Oxford) 2004; 43: 1028-33.
Summary: Oral health of 120 BS patients was compared with 35 patients having recurrent aphthous stomatitis (RAS) and 65 healthy persons. The oral health of BS patients was not different from that of patients with RAS but was found to be significantly poor when compared to that of healthy controls. An elevated plaque index score seemed to be a significant risk factor for increased severity score in BS.

Authors: Yoshida A, Kawashima H, Mutoyama Y *et al.*

Title: Comparison of patients with Behçet's disease in the 1980's and 1990's.

Ophthalmology 2004; 111: 810-5.

Summary: This is a retrospective study coming from the uveitis clinic of Tokyo Hospital. The main purpose was to determine formally the authors' contention that the visual prognosis was getting better within the recent years. The patients were divided into 2 groups according to the date of their first visit (80's and 90's). The data suggested fewer ocular attacks per year and better visual outcomes for patients registered in the 90's. Earlier referral to a specialty clinic and a better patient compliance might be possible explanations for this improved outcome.

Authors: Hiller N, Lieberman S, Chajek-Shaul T, Bar-Ziv J, Shaham D.

Title: Thoracic manifestations of Behçet disease at CT.

Radiographics 2004; 24: 801-8.

Summary: This comprehensive review gives detailed imaging information for the thoracic manifestations of Behçet's disease.

Authors: Siva A, Altintas A, Saip A.

Title: Behçet's syndrome and the nervous system.

Curr Op Neurol 2004; 17: 347-57.

Summary: A review on the neurological involvement in Behçet's syndrome. Neurological involvement occurs in the majority of Behçet's patients as focal parenchymal involvement. Isolated cerebral venous sinus thrombosis has a better prognosis.

Authors: Tugal-Tutkun I, Urgancioglu M

Title: Childhood onset uveitis in Behçet's disease:

A descriptive study of 36 cases.

Am J Ophthalmol 2003; 136: 1114-9.

Summary: This retrospective study from a large uveitis clinic in Istanbul describes 36 BS patients who had the onset of uveitis before the age of 17. The majority of the patients were men. Ocular involvement was mostly bilateral (30 of 36 patients) and in the form of panuveitis (31 of 36 patients). Fifteen of the 66 involved eyes (23%) were legally blind (visual acuity less than 0.1 on a 10 scale Snellen chart) at the final visit. Cataract formation, maculopathy, optic atrophy and posterior synechiae were the most common ocular complications.

Authors: Ikonomidis I, Lekakis J, Stamateopoulos K, Markomihelis N, Kaklamanis PG, Mavrikakis M.

Title: Aortic elastic properties and left ventricular diastolic function in patients with Adamantiades-Behçet's disease.

J Am Coll Cardiol 2004; 43: 1075-81.

Summary: In this cross-sectional study several echocardiographic parameters of 82 Behçet's disease patients were compared with those of 24 normal controls. Aortic elastic properties and left ventricular diastolic function were impaired in Behçet's disease patients. There was a correlation between disease duration and aortic stiffness.

Treatment

Authors: Ohno S, Nakamura S, Hori S *et al.*

Title: Efficacy, safety, and pharmacokinetics of multiple administration of Infliximab in Behçet's Disease with refractory uveoretinitis.

J Rheumatol 2004; 31: 1362-8.

Summary: In this open study 13 BS patients with active uveoretinitis resistant to cyclosporine A were treated for 14 weeks with repeated doses of infliximab at either 5 or 10 mg/kg. The primary outcome measure was the difference between the frequency of ocular attacks before and after treatment. Infliximab dramatically reduced the rate of ocular attacks and both dosages showed equal efficacy. Tuberculosis was observed in 1 patient from the 10 mg group.

Authors: Yücel AE, Kart-Koseoglu H, Akova YA, Demirhan B, Boyacioglu S.

Title: Failure of infliximab treatment and occurrence of erythema nodosum during therapy in two patients with Behçet's disease.

Rheumatology 2004; 43: 394-6.

Summary: Infliximab 5 mg/kg was not effective in 2 patients with Behçet's disease and aggravated nodular lesions. A 56 year old man with gastrointestinal involvement developed multiple nodular lesions 30 days following the 4th dose of infliximab. He had also a perianal fistula which did not respond to infliximab. A 20 year old woman had painful nodular lesions and scleritis causing significant loss of vision despite treatment with various immunosuppressives. After an initial response to infliximab her vision deteriorated significantly 3 days after the 3rd infusion. She also developed multiple nodular lesions.

Authors: Kötter I, Vonthein R, Zierhut M *et al.*

Title: Differential efficacy of human recombinant interferon

2a on ocular and extraocular manifestations of Behçet's disease: Results of an open 4 center trial.

Semin Arthritis Rheum 2004; 33: 311-9.

Summary: This uncontrolled study was originally designed to test the efficacy of interferon alfa 2a on severe and treatment resistant uveitis of Behçet's disease (Kötter I *et al.* *Br J Ophthalmol* 2003; 87: 423-31). The authors now report the effect of interferon 2a on extraocular manifestations of Behçet's disease. Fifty patients received interferon 2a mainly at a daily dose of 6 million units. The mean observation period was 36 months. Interferon seemed to be effective for genital ulcerations, arthritis and skin lesions but was less effective for oral ulceration. Fever, arthralgia, injection site reactions, leucopenia, alopecia and depression were the main side effects of interferon alpha 2a in addition to the high cost that mandates its use only in selected cases.