

## CLINICAL STUDY

**Behcet's syndrome**

Kovacova E, Salmas, J, Stenova E, Bedeova J, Duris I

*1st Department of Internal Medicine, Faculty of Medicine, Comenius University,  
Bratislava. E.Kovacova@zoznam.sk***Abstract**

**Behcet's syndrome is a systemic illness of unknown etiology characterized by necrotising vasculitis originally described in Turkey. Typical manifestations include urogenital ulcerations, eye inflammation and migratory thrombophlebitis. An unusual course of this disease is described. A 56 year-old man was admitted to the hospital with fever, milk-glass opacities on chest x-ray, mucosal defects on the tongue and penis, hematuria and proteinuria with functional disorder of kidney. Chlamydia pneumoniae, CIK positivity and C 3 complement decrease were found. Antibiotics and antimycotic drugs have shown only slight improvement of pulmonary lesions. An excellent effect in all pathological findings was achieved after prednison administered in dosis of 1 mg/kg and later cyclophosphamide administration (Fig. 7, Ref. 12).**

**Key words:** Behcet's syndrome, cyclophosphamide, prednison, antibiotics, antimycotic drugs.

This syndrome or disease was originally described by Turkish dermatologist Behcet. In order to be able to state the latter diagnosis in patients with no inflammatory bowel disease, according to O'Duffy's criteria, they are to suffer also from oral aphthosis and there must be at least two extra findings of the following: genital aphthae, synovitis, posterior uveitis, cutaneous pustular vasculitis or meningoencephalitis. The exclusion of patients with inflammatory bowel disease and Reiter syndrome is most important because they both have frequently recurrent aphthous manifestations. Recurrent herpes simplex infection must be excluded by immunoperoxidase reaction of biopsy material. Cutaneous pustular vasculitis in Behcet's syndrome is similar to erythema nodosum, Sweet syndrome and pyoderma gangrenosum but show leukocytoclastic vasculitis (1). Behcet's disease is characterized by oral and genital aphthous ulcers and ocular inflammation but can involve also the skin, gastrointestinal tract, vascular system, nervous system and connective tissue. Symptomatology is sometimes similar to other vasculitis or infections with skin manifestations. Esophageal involvement with dysphagia, odynophagia, chest pain and hematemeses with ulcers and filiform polyps were found, and after corticoids and azathioprine or chlorambucil the lesions withdrew. In some cases, intestinal and esophageal ulcers were successfully treated with sulfasalazine and low-dose cyclosporine (2).

Among ocular changes, posterior uveitis – retinal vasculitis is the most serious. The optimal treatment of syndrome is not

known. The natural course of the disease is unforeseeable. Spontaneous remissions are known. Immunomodulation with corticosteroids, colchicine, thalidomide, cyclosporine, tacrolimus (FK 506) and alfa interferon have been used in therapy, the last one with excellent result in systemic disease. Surgery in deep intestinal ulcers is indicated although ulcer recurrence is common (3).

Intestinal involvement can resemble Crohn Disease and intestinal bleeding or perforation may occur as a result. Resistant cases may respond to thalidomide. Cavernous transformation of the portal vein, associated with portal thrombosis is recognized (4).

We have an opportunity to observe the patient with Behcet's syndrome and concomitant Chlamydia pneumoniae infection.

57 year-old patient (teacher) admitted to the hospital in april 2005 because of fever. He complains to suffer from various symptoms since December 2004 (Figs 1–7), including fatigue, fever exceeding 38.5 C, sweating during the night and eating difficulties, painful ulcers in the mouth and loss of weight amount of

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1st Department of Internal Medicine, Faculty of Medicine, Comenius University, Bratislava, and Department of Radiology, University Hospital, Bratislava, Slovakia

**Address for correspondence:** I. Duris, MD, DSc, 1st Dept of Internal Medicine, University Hospital, Mickiewiczova 13, SK-813 69 Bratislava 1, Slovakia.

Fax: +421.2.57290591



Fig. 1. Skin defects on the foot.



Fig. 2. Nodular angiectasis localized on the foot step.



Fig. 3. Ulcerative defects on the penis.

7 kg. Initially he thought that he had a flu. Augmentin administration was without any effect.

His case-history contained frequent bronchitis and „balanitis“ reoccurring since childhood. His family history revealed rheumatic disorders of his mother, and his father died suffering with colorectal cancer (79). Our patient had no history of allergy, smoked 30 cigarettes and drank 1–2 bottles of beer daily.

On examination, the patient was normosthenic, bucal sites of his tongue were covered by mucosal defects (Figs. 4, 5), he had aphtous defects on penis and scrotum (Fig. 3), his lungs were clear except for a few bilateral rhonchi and distal parts of his foot covered with skin defects and nodular angiectasis (Figs. 1, 2).

The blood pressure was 120/80, PR: 100/min, Temperature: 37.2 C. Laboratory tests: ESR: 100/110, Leucocytes: 11.7, neutrophils: 83 %, Monocytes 7 %, Ly: 7 %, Urine: proteinuria, blood ery: 25, Leu: 10–12.

Other laboratory findings: (only pathological): kreatinin 78  $\mu\text{mol/l}$  – increasing to 382  $\mu\text{mol/l}$ , the same urea. Increased values of GMT, ALP, CRP, ferritin, lacticodehydrogenase, beta<sub>2</sub>-microglobulin, neopterin, CIK, alpha<sub>1</sub> and alpha<sub>2</sub> globulins, IgA, IgM, anti-nucleoli antibodies, Chlamydia pneumoniae IgA and IgG antibodies were found.

Chest x-ray: and CT: bilaterally reticulonodular – and milk – glass opacities, see CT before and after therapy (ATB, antimycotica, prednison) (Figs. 6, 7).

Bronchoscopy: chronic atrophic tracheobronchitis. Echocardiography, leukoscint, USG of abd.cavity without pathology. Spirometry: mild disorder of diffusion.

Ophtalmology: myopic astigmatism o.u.

Colonoscopy without any pathology, Gastroscopy: Antral atrophic gastropathy, Oesophageal varix – Paquet I in the upper part of oesophagus.



Fig. 4. Aphthous enanthema in the mouth.



Fig. 5. Ulcers on the tongue.

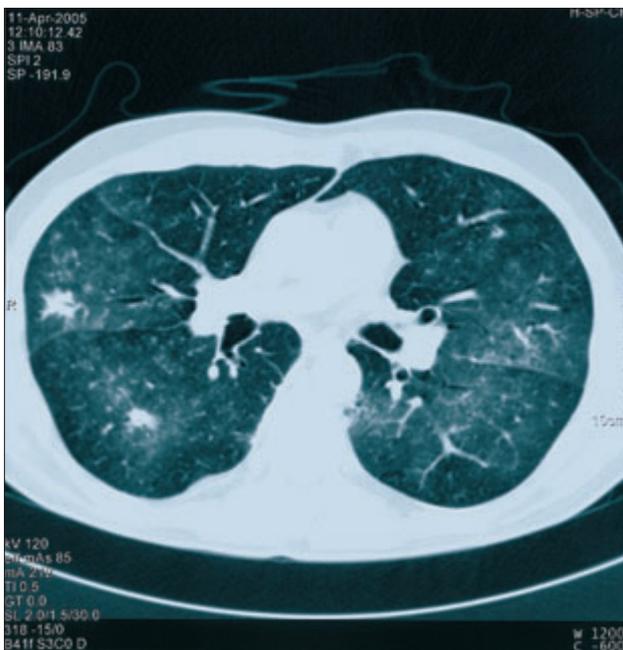


Fig. 6. CT picture of “milk-glass” by interstitial pneumonia before therapy.



Fig. 7. CT picture realized after therapy. Conclusion: without pathologically findings.

Epicrisis: The patient had been well until three months before the admission when he started to be febrile, suffer from fatigue, and flu-like symptoms.

Antibiotics (Amoxicilin) had no effect. Ulcers in mouth and mucosal defects on penis as well as pulmonary and renal findings led us to the diagnosis of Behcet's disease. Prednison in dosis of 1 mg/kg improved immediately the oral findings, led to a decrease in level of creatinin, proteinuria as well as hematuria. The patient was able to eat and put on weight. Anemia was also slowly improving. Three months later, the patient was stable on Prednison in dosis of 20 mg/day. 6 months later sANCA, proteinuria have appeared and cyclophosphamide therapy started, till now (1 year) the patient is in good condition.

### Discussion

Vasculitides are pathological conditions with various clinical and laboratory overlapping syndromes. Our case is an example that clinically and laboratory at the beginning had the patient all characteristics of Behcet's syndrome but in the course of the disease laboratory findings are indicating also to Wegener granulomatosis. Behcet's syndrome is multisystem disorder with recurrent oral and genital ulcerations as well as with ocular involvement. Behcet's disease (BD) is vasculitis of unknown origin mainly seen in the area of the Silk Route and rare in Western countries (5, 10). In addition to the latter changes, gastrointestinal, pulmonary and renal disorders are sometimes present. Deep thrombosis and pulmonary emboli are not unusual but the symptoms mentioned in the first order are of greatest significance for the diagnosis (5). In some countries (Brasil) 23 % of BD cases are associated with neurological complications (intracranial hypertension, cerebral trombophlebitis and aseptic meningoencephalitis, etc. (6).

The fact of unknown etiology leads to many hypotheses among them to the infectious origin or drug-induced vasculitis (carbamazine, hydralazin, trimethoprim/sulfisoxazol), the facts of which are similar to Sweet syndrome secondary to noxious products released from granulocytes (10). In our case the infectious genesis, namely in coincidence with Chlamydia pneumoniae infection functioning as a promotor cannot be excluded. The pulmonary finding improved slightly after ciprinol.

Ulcerations and renal complications reacted only on prednison. The current therapy of antineutrophil cytoplasmic vasculitides, which are mostly life threatening diseases improved the life survival.

The current therapy of this chronic relapsing systemic vasculitis of small and large vessels is basically empiric, however prevents organ damage. These drug included various anti-inflammatory and immunosuppressive drugs as colchicine, azathioprin, corticosteroids, dapsone, cyclosporine A, tacrolimus. Recently thalidomide, interferon alpha, gamma, acyclovir, methotrexate, benzathine penicillin (?), cyclophosphamide and anti-TNF factor. Infliximab was effective mainly in sight-threatening panuveitis and cerebral vasculitis (7, 8, 9, 11, 12).

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