Brief report

The angio-Behçet syndrome

A. van Ede a,*, M. van Deuren a, P. Smits b, H. Wollersheim b

a Department of Internal Medicine, University Hospital, PO Box 9101, 6500 HB Nijmegen, Netherlands
b Department of Pharmacology, University Hospital, PO Box 9101, 6500 HB Nijmegen, Netherlands

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Abstract

Two men presented with recurrent venous thrombosis. One of them also suffered from arterial thrombosis and aneurysm. Additional history-taking revealed that both suffered from recurrent oral and/or genital ulcers, erythema nodosum and iritis. Consequently a diagnosis of ‘angio-Behçet syndrome’ was made. Related to the clinical observations in these patients, we discuss the complications and the management of angio-Behçet syndrome. Treatment includes anticoagulants and immunosuppressive drugs.

Keywords: Behçet’s disease; Venous thrombosis; Arterial thrombosis; Aneurysm

1. Introduction

In 1937 Hulusi Behçet, a Turkish dermatologist, described and associated the classic triad of oral and genital ulcers and iridocyclitis [1]. The following case reports describe some peculiar manifestations of the disease with severe arterial and venous complications also known as the ‘angio-Behçet syndrome’.

2. Case 1

A 29-year-old Turkish male complained about a painful calf and groin for 3 months. A venous thrombosis stretching out from the popliteal to the iliac vein was diagnosed by echography. Despite treatment with intravenous heparin and oral anticoagulants the thrombosis recurred twice. In that same period the patient suffered from severe headache, fever, thoracic pain and a palpable node-like tumour in the right groin. Laboratory examination showed an elevated sedimentation rate (100 mm). Further investigation did not reveal a malignancy, cerebral disease or temporal arteritis. Biopsy of the node-like tumour in the right groin showed reactive follicular hyperplasia and venous intimal swelling. Shortly after the biopsy an acute obstruction of the right femoral artery occurred, and a stent was placed by operation. Histological examination of the resected femoral artery showed thrombosis surrounded by proliferative inflammation and obliterative arteritis in the vasa vasorum. The postoperative course was complicated by wound dehiscence, slow wound healing and recurrent haemorrhages. Because a bacterial infection was suspected, gentamycin gel was deposited around the stent during a second operation. Perioperatively the tissue had a ‘cheese-like’ appearance, but all cultures for Mycobacterium tuberculosis re-
mained negative. Fifty-two days after the initial operation the stent became suddenly loose and a life-threatening arterial haemorrhage occurred. The patient was operated immediately and the stent was removed. Two days later, 8 months after the onset of the illness, the patient was referred to our department.

Additional history-taking revealed that the patient had been suffering from recurrent oral and genital ulcers for 7 years. He had also noticed red and raised lesions on both legs for 9 months. His father was visiting the ophthalmological department because of Behget’s disease and his brother also suffered from recurrent oral ulcers. Upon referral the patient presented with an open wound in the right groin with 2 drains. The lower leg showed a diminished circulation, but was not threatened. There was an aphthous ulcer on the lower lip and erythema nodosum on the left upper leg. The eyes and genitals showed no abnormalities.

Behget’s disease was diagnosed and treatment with prednisone (60 mg/day) and cyclosporine (8 mg/kg/day) was started. The wound healed very quickly and the sedimentation rate normalized. Because of the formation of collateral vessels in the right leg an expectative course was followed.

3. Case 2

A 42-year-old male had had his leg in a cast for a week because of an injury to his left ankle in January 1990. Thereafter his left ankle remained swollen and he suffered from muscular pain. In April a thrombosis of the femoral vein, which was probably not recent, was detected by phlebography. Treatment with oral anticoagulants was started. One week later fever and pain developed and the circumference of the right leg increased. Another phlebography showed a progressive thrombosis of the left femoral vein and treatment with streptokinase was started.

In July the patient complained of pain and swelling of the right upper leg and ankle. Phlebography showed a normal deep venous system and an abdominal CT-scan did not show vascular obstruction. The patient was referred to our department for further investigation.

Additional history-taking revealed intermittent fatigue, red skin lesions and pustules, purulent wounds, arthralgia, oral aphthae and recurrent iritis since 1986. On physical examination an aphthous stomatitis, a small red lesion on the left leg, and a swollen right leg with pitting oedema around the ankle were noticed. The sedimentation rate was elevated and phlebography revealed an obstruction of the external iliacal vein with evident collateral vessels. A skin biopsy showed fibrinoid damage to the vascular wall with some vasculitis. Because of the combination of recurrent thrombosis, iritis, aphthous stomatitis, mucocutaneous manifestations and elevated sedimentation rate a diagnosis of Behget’s disease was made. Treatment including heparin, acenocoumarol and carbazalate calcium was started.

4. Discussion

Behget’s disease is characterized by the triad of recurrent oral and genital aphthous ulcers and iridocyclitis [1]. In 1990 an international study group proposed a new set of diagnostic criteria. Behget’s disease is diagnosed if oral ulcers are present accompanied by 2 of the following 4 manifestations: recurrent genital ulcers, ocular manifestations, mucocutaneous manifestations or a positive pathergy test [2]. The prevalence varies from 0.3/100000 in Minnesota to 10/100000 in Japan and is highest in the Mediterranean countries, the Middle-East and Japan. The male preponderance is 5 to 1 and the disease presents mostly in the third decade [3]. The aetiology is still unknown. Possibly it is a multisystem disorder in which a genetic predisposition (association with HLA-B5), exogenous factors like viruses and immunological reactions play a role [3–5].

In the case of predominant vascular manifestations the disease is called ‘angio-Behget syndrome’ which includes cardiomegaly, cardiac and vascular inflammation, arterial and venous occlusions and aneurysms [6]. Vascular manifestations, mainly venous lesions occur in 7 to 29% of patients [7-9]. Arterial manifestations are reported in 2 to 3% [6,10]. Vascular manifestations are more often reported in men, in the case of familial clusters and in later stages of the disease [4,6]. Aneurysms are more frequent than occlusions and are mostly present in the pulmonary arteries and in the abdominal aorta. They have a poor prognosis because of rupture with
fatal outcome [6,11]. The histopathology shows fragmentation and splitting of elastic fibres in the media with obliterator endarteritis of the vasa vasorum. Occlusion may occur in all arteries and may lead to aseptic femur head necrosis, pulseless disease, subungual infarction, renal hypertension, coronary disease and claudication.

Both cases illustrate the importance of good history-taking. Focusing on the vascular problem alone may lead to the wrong diagnosis and treatment. The Turkish male suffered from venous as well as arterial thrombosis and aneurysm. Also the much-dreaded complication of rupture of the prosthesis occurred. Although the patient suffered from severe headache in the same period, a diagnosis of 'neuro-Behtzet' syndrome could not be made because other central nervous system disorders were absent [4].

All manipulation of blood vessels may lead to occlusion or aneurysm that may be induced by vasculitis. This corresponds with the pathognomonic pathergy test: a sterile papular or pustular reaction after a needle prick due to vasculitis of small skin vessels [5,6]. Therefore arterial punctures are contraindicated. Although steroid therapy may lead to infection or disturbed wound-healing, Suzuki et al. recommend immunosuppressive therapy (corticosteroids 1 mg/kg/day) following operative procedures using prosthetic material if involved areas are histologically inflamed [12,13].

In mild to moderate cases of the angio-Behtzet syndrome NSAIDs (for superficial venous disease), low-dose acetylsalicylic acid prophylaxis or colchicine are prescribed. In severe cases anticoagulants and immunosuppressive therapy, like corticosteroids, azathioprine, cyclophosphamide and cyclosporine are recommended [14–17]. Chlorambucil alone or in combination with steroids can be very effective [18,19].

References