Rheumatologists should be conscious of the existence of neurological deterioration associated with this condition. Progressive disease caused by mutations of the sterol 27-hydroxylase gene (CYP27A1) that lead to reduced synthesis of bile acids, particularly chenodeoxycholic acid [3]. Absence of the negative feedback mechanism of cholic acid and chenodeoxycholic acid on 7α-hydroxylase, which is a rate-limiting enzyme in bile acid synthesis, increases the activity of this enzyme and results in an accumulation of cholesterol and cholestanol in various tissues, which is the cause of the clinical manifestations [1]. Frontal dementia has also been described in cerebrotendinous xanthomatosis [2], usually together with other neurological findings (pyramidal signs, seizures, mental retardation, and cerebellar ataxia).

Cerebrotendinous xanthomatosis is a rare recessive autosomal disease caused by mutations of the sterol 27-hydroxylase gene (CYP27) that lead to reduced synthesis of bile acids, particularly chenodeoxycholic acid [3]. Absence of the negative feedback mechanism of cholic acid and chenodeoxycholic acid on 7α-hydroxylase, which is a rate-limiting enzyme in bile acid synthesis, increases the activity of this enzyme and results in an accumulation of cholesterol and cholestanol in various tissues, which is the cause of the clinical manifestations. Long-term treatment with chenodeoxycholic acid, which influences the negative feedback of cholesterol and acid bile synthesis and decreases serum cholestanol levels, can arrest or even reverse progression of the disease.

We stress the value of early diagnosis to halt the progressive neurological deterioration associated with this condition. Rheumatologists should be conscious of the existence of cerebrotendinous xanthomatosis. Clinical recognition is not difficult if one is aware of this rare disease.

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Infliximab in the treatment of hepatic vein thrombosis (Budd-Chiari syndrome) in three patients with Behçet’s syndrome

Sir, Hepatic vein thrombosis leading to Budd-Chiari syndrome (BCS) constitutes approximately 2% of all vascular complications of Behçet’s syndrome (BS) and has a poor prognosis [1]. In a retrospective study, 10 out of 14 BS patients with BCS had died within a mean of 10.4 months [2], Immunosuppressives are empirically used for this complication but their effect on outcome is not known. Transjugular intrahepatic portosystemic shunting (TIPS) or hepatic transplantation can be considered as alternative life saving interventions [3]. However, there has been no experience in BS with these procedures and the heightened inflammatory response of BS to penetrating trauma (the pathergy reaction) may complicate invasive procedures [4, 5].

Anti-TNF agents, especially infliximab, have shown rapid and dramatic effect in the treatment of refractory ocular, mucocutaneous, joint, gastro-intestinal and CNS manifestations of BS in several case reports and case series [6]. However, no data exist about the effect of infliximab or other anti-TNF agents on venous involvement of BS.

We here present our experience with infliximab on three BS patients with severe BCS.

Case 1: a 12-yr-old male BS patient was hospitalized because of haemoptysis and abdominal swelling. He was diagnosed as having pulmonary arterial aneurysms and BCS. Treatment with prednisolone 1 g/kg/day and cyclophosphamide 1 g/month was started but 10 days later he had an emergency lobectomy following an abundant haemoptysis. Two months later while under treatment with cyclophosphamide and prednisolone, he developed signs of hepatic encephalopathy. A Doppler examination showed extension of thrombosis to all three hepatic veins. Infliximab 200 mg (5 mg/kg) was added to his treatment. However, his clinical status continued to deteriorate and he died 4 weeks later.

Case 2: a 28-yr-old male BS patient was diagnosed as having BCS when he presented with ascites and hepatosplenomegaly. All three hepatic veins and the suprahepatic segment of the inferior vena cava were thrombosed. Treatment was started with prednisolone 1 mg/kg/day and monthly boluses of 1 g of infliximab 200 mg (5 mg/kg) with a good response. However, 8 months later he developed an abundant haemoptysis and needed a lobectomy due to extensive pulmonary arterial aneurysms and BCS. Treatment with cyclophosphamide and prednisolone, was resumed with a good response.

Case 3: a 30-yr-old male BS patient was diagnosed as having BCS and was treated with cyclophosphamide and prednisolone 1 g/kg/day. He developed an abundant haemoptysis and needed emergency lobectomy. Infliximab was started with a good response. He died 6 months later of sepsis caused by Gram-negative bacteria.

References

FIG. 1. Enlarged Achilles tendon.

FIG. 2. Brain MRI depicts bilateral dentatus hyperintensity.
cyclophosphamide but he developed signs of liver failure 6 months later. A CT scan showed the extension of the thrombus in the inferior vena cava and formation of new thrombus in the brachiocephalic vein. Infliximab 3 mg/kg was given along with 1 g methyl prednisolone. He developed hepatic encephalopathy the following day and died in hepatic coma 3 weeks later.

Case 3: a 15-yr-old male BS patient was diagnosed as having BCS when he developed abdominal swelling. Physical examination revealed pustules at the intravenous needle insertion sites (suggesting a positive pathergy test), bilateral papilloedema, ascites and hepatomegaly. A Doppler USG examination showed thrombosis in the right hepatic vein and in the inferior vena cava. No cranial sinus thrombosis was detected with MRL. He was prescribed infliximab 200 mg (5 mg/kg). On the fourth day of the first infliximab perfusion papilloedema had disappeared but Doppler USG findings remained unchanged. He was administered three pulses of 1 g methylprednisolone followed by prednisolone 1 mg/kg/day. Three weeks after the second infusion of infliximab he developed severe headache and diplopia. Further investigation revealed the presence of bilateral papilloedema and emergence of cranial sinus thrombosis. There was no change in the size of the thrombus in the right hepatic vein but the thrombus in the inferior vena cava had regressed. Infliximab treatment was stopped and monthly pulses of 1 g cyclophosphamide were started. Six months later he had no papilloedema and ascites had disappeared. Doppler USG showed regression of the thrombi in the hepatic vein and inferior vena cava.

A recent case report described the dramatic and long lasting effect of infliximab in a BS patient with pulmonary artery aneurysms and life-threatening haemoptysis [7]. Rapid resolution of the thrombi in the pulmonary arteries was seen within 2 weeks following the administration of infliximab. Our experience in three BS patients complicated with BCS was not as promising. On the other hand we cannot say for sure that infliximab was ineffective. The two patients who had died had almost end-stage liver failure when infliximab was given. In the third patient, although we have noted a regression in the size of the thrombus in the inferior vena cava, the rather simultaneous development of cranial sinus thrombosis prompted us to stop infliximab in the light of isolated reports of patients developing thrombophlebitis during treatment with infliximab. Some of these thromboses were seen in patients with sarcoidosis [8] or Crohn’s disease [9], conditions that are known to have increased thrombotic tendency. In contrast, the development of cerebral vein thrombosis in a patient with ankylosing spondylitis [10] causes concern since thrombosis is not a known feature of this disease. On the other hand, until now we have used infliximab in 14 additional BS patients mostly with severe and resistant uveitis, and except in the case we report here we have not seen any other patient developing thrombosis. Further experience is needed to determine the efficacy and safety of infliximab in the treatment of venous thrombosis of BS.

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Chikungunya fever

Sir, we read with interest the article on chikungunya outbreak by A. Volpe [1] in the November issue of Rheumatology. It increases our awareness of chikungunya, which can potentially pose a more serious health problem in the UK due to the strong links between UK and Indian subcontinent both in terms of tourism and British citizens with Indian origin visiting India. According to WHO [2] the number of suspected cases of chikunguya are around 1.25 million in India, which raises the need for the medical professionals of the UK to be aware of this disease and for the individual tourists to take extra precautions to prevent mosquito bites while visiting India.

We have, in our Rheumatology Department, recently seen two individuals of Indian origin (one male aged 40 yrs and a female aged 26 yrs) coming back from their holiday in India presenting with fever, general malaise and polyarthralgia mainly affecting their large joints. Their clinical examination revealed tender joints but no obvious synovitis. Both complained of considerable early morning stiffness. Their investigations were all normal except for elevated ESR and CRP. Both were managed as reactive arthropathy and responded well to i.m. depomedrone. Both gave a history of speaking to friends and relatives back in India who had suffered similar symptoms in the past few weeks and was put down to chikungunya. Although there were no formal tests available to confirm the diagnosis in these two individuals, we feel the history and presentation are fairly convincing of chikungunya.

Chikungunya fever [2, 3], is a viral illness that is spread by the bite of infected mosquitoes. The disease resembles dengue fever and is characterized by severe, sometimes persistent, joint pain, as well as fever and rash. It is rarely life-threatening although 200 mortalities in Reunion Island and to a lesser extent in India in 2005–06 periods have been attributed to a mutated form of the virus [3]. Nevertheless widespread occurrence of diseases causes substantial morbidity and economic loss. After an interval of more than 20 yrs, chikungunya fever has been reported from several countries including India, and various Indian Ocean islands including Comoros, Mauritius, Reunion and Seychelles.

From February 2006 to 10 October 2006, the WHO Regional Office for South-East Asia has reported 151 districts in 8 states/provinces of India affected by chikungunya fever [2]. The affected provinces are Andhra Pradesh, Andaman & Nicobar Islands, Tamil Nadu, Karnatakta, Maharashatra, Gujrat, Madhya Pradesh, Kerala and Delhi. More than 1.25 million suspected cases have been reported from the country, of which 752 245 were from...