CHEST PAIN AFTER TRAVELLING IN THE TROPICS

A 20-year-old man presented to doctors at the Division of Infectious Diseases of the University Hospital in Basel, Switzerland in November 2002. He had a 2-week history of severe burning thoracic pain, which radiated from the right axilla in the distribution of the second to the fifth thoracic dermatomes. He did not complain of cough or shortness of breath. He was previously healthy and was taking no medication. Of note is the fact that he had been travelling for 10 weeks in Thailand and Indonesia where he suddenly developed fever, fatigue, diarrhoea, arthralgia, headache and chest pain. He gave a history of having eaten local food while travelling, including freshwater fish and shrimps.

Stool samples showed infection with *Salmonella enteritidis* and *Campylobacter jejuni*. He was treated with azithromycin for 4 days, after which the fever resolved, but the thoracic pain worsened considerably. When the doctors examined him again he had no skin lesions, his neck was not stiff and he had hyperaesthesia along the second to fifth dermatomes.

Blood tests showed a normal white cell count with 8.5% eosinophils and normal C-reactive protein. The chest radiograph was normal, but an MRI of the thoracic cord suggested myelitis in the thoracic region. A lumbar puncture gave clear, colourless cerebrospinal fluid (CSF) of normal pressure that had normal glucose and lactate, but showed a pleocytosis and increased protein. There were no microorganisms on Gram staining and no evidence of *Mycobacterium tuberculosis* or *Cryptococcus* antigen. Cultures of CSF remained sterile. Syphilis and HIV were excluded. However, the CSF leucocyte differential showed eosinophilia and eosinophilic meningitis with thoracic myelitis was diagnosed. The attending doctors then looked for a parasitic cause.

Serological testing for all known helminths produced IgG specific to 4 *Gnathostoma spinigerum* antigens. The patient was given albendazole, 800 mg daily and prednisolone 50 mg daily for 3 weeks. He made an uncomplicated recovery and was well more than 6 months later.

Eosinophilic meningitis can be caused by intracerebral TB, syphilis or lymphoma and various helminth species, including *Angiostrongylus cantonensis, G. spinigerum, Toxocara canis* and *Paragonimus westermani*. Gnathostomiasis is regarded as a re-emerging infectious disease, seen increasingly frequently in temperate regions as a result of increased travel to the tropics. The disease is potentially fatal and cats and dogs are reservoirs for adult *Gnathostoma* worms, passing eggs in faeces that hatch in water, so contaminating many species of fish and other vertebrates. The typical picture is one of fever, headache and rash, followed by painful radiculomyelopathy and eosinophilia. The parasite migrates around the body and penetrates the nerve root to reach the spinal cord, from where it migrates to the brain in potentially fatal cases. If not treated in time, permanent neurological deficit, paralysis and fatal subdural haemorrhage are common. This patient was fortunate that he had a good history of tropical travel, a typical clinical picture and an MRI picture of myelitis that allowed these astute doctors to diagnose his condition relatively early.

Elzi L, *et al. Lancet* 2004; **363:** 1198.

Bridget Farham

SINGLE SUTURE

CUT OUT THE FIZZ

A study of 650 schoolchildren in Britain has shown that cutting down on fizzy drinks really does help prevent childhood obesity. At 6 primary schools in southwest England half of the children went to hour-long lessons designed to stop drinking fizzy drinks and drink water or diluted fruit juice instead. The other half did as they pleased. After a year, the number of overweight or obese children in the group who were asked to reduce their consumption of fizzy drinks had fallen slightly. But in the 'fizzy' group, the number who were overweight or obese had increased by 8%. This is the first study that demonstrates that this type of intervention can make a difference — but will be difficult to implement in a world where marketing of fizzy drinks is rife, and fizzy drink dispensers in schools generate revenue.

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