An interesting case in a recent *Lancet* describes a 58-year-old man who presented to his local hospital in the USA with fever, angina and haematuria. He was noted to have a chronic systolic murmur, acute renal failure, bleeding from the nose and haemoptysis, caused by a nasal ulcer. He was treated with penicillin G and gentamicin, but 4 sets of blood cultures were negative. A transoesophageal echocardiogram showed a calcified bicuspid aortic valve with moderate stenosis, but no vegetations. Serum creatinine was raised, and a 24-hour urine collection showed microscopical haematuria, granular casts and increased protein. The patient was a pest exterminator and so exposed to toxins, rodents and animal carcasses. Phase I *Coxiella burnetii* antibodies were detectable, but phase II titres were negative.

He was transferred to a larger hospital where the antibiotics were stopped. The attending physicians were unable to culture bacteria or fungi from blood samples. Further testing for *B. burnetii* was negative. A renal biopsy showed occasional glomerular crescents. Based on his symptoms, nasal inflammation, progressive renal failure, ANCA serology and his doctors' inability to isolate an infectious cause, they discussed Wegener's granulomatosis. He was given oral cyclophosphamide and prednisone and his symptoms improved.

In March 2004, the patient returned with an acute myocardial infarction, recurrent fever and deteriorating renal function. Echocardiography showed an oscillating aortic valve mass and aortoventricular fistula. At surgery, the aortic valve was found to have large verrucous vegetations and a perivalvular abscess. Histology of the resected valve was unremarkable and no micro-organisms were seen with methenamine silver stain. Bacterial, fungal and mycobacterial cultures of the heart valve were sterile. The immunosuppressive drugs were stopped. The physicians sent a blood sample to the Centers for Disease Control and Prevention. The samples were positive for *Bartonella henselae* and *B. quintana*. At this stage the patient told the doctors that he had raised a brood of feral kittens. He was treated with doxycycline for 5 weeks and gentamicin for 2 weeks. In December 2004 he had normal renal function and ANCA testing was normal.

*B. henselae* causes cat-scratch disease and is a leading cause of culture-negative endocarditis. The patient's illness was probably caused by exposure to the feral kittens. Both *B. henselae* and *B. quintana* occur in Africa. The latter causes trench fever and may also cause bacillary angiomatosis and hepatic peliosis in immunocompromised people. Of these diseases, only cat-scratch disease and bacillary angiomatosis have been reported in Africa.


Bridget Farham

### SINGLE SUTURE

**USE REHAB NOT SURGERY FOR LOWER BACK PAIN**

A trial that compared surgical stabilisation of the lumbar spine with an intensive rehabilitation programme for patients with chronic low back pain showed that rehabilitation is the way to go. Chronic low back pain (pain lasting for more than 12 months) is common and expensive for individuals, the health care system and society through lost working days. This trial involved 349 patients with chronic back pain in the UK. A total of 176 were assigned to spinal fusion and 173 to an intensive programme of rehabilitation, led by physiotherapists, that involved daily exercises and cognitive behavioural therapy. After 2 years, 38 of the patients assigned to rehabilitation had also been operated on. However, although there appeared to be a slight advantage to surgery, the actual differences were small when one takes into account the costs and risks associated with surgery. The authors concluded that there is no clear evidence that early spinal fusion had any advantages over intensive rehabilitation.