Reactive arthritis due to *Chlamydia psittaci* associated with HLA-B27 genotype

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To the Editor: We report a case of reactive arthritis with an unusual cause in a previously well 47-year-old male landscape gardener. The patient presented with acute onset of left ankle arthritis. He had a 10-day history of a productive cough associated with mild fever, back pain and arthralgias. His temperature was 37.7°C and occasional crackles were audible at the lung bases. His left ankle was tender, with decreased range of movement. The provisional diagnosis was atypical pneumonia with reactive arthritis.

A chest x-ray was normal. Laboratory tests showed an elevated white cell count of 11.93×10^9/L (reference range [RR], 4–11×10^9/L), with a C-reactive protein level of 326 mg/L (RR, < 3 mg/L). Arthrocentesis showed increased white cells but was negative for crystals and bacteria. Serological tests were positive for *Chlamydia psittaci* (IgM, IgA and IgG were all elevated and increased during illness), and the patient was also positive for human leukocyte antigen (HLA)-B27. He was initially treated with meloxicam for the arthritis. Oral prednisone was added when his joint symptoms became more disabling. Weaning of prednisone was attempted, but symptoms recurred. Sulfasalazine was subsequently added. Symptoms took about 8 weeks to resolve.

Sufferers of psittacosis are infected by inhaling the obligatory intracellular bacterium, *Chlamydia psittaci*, from the faeces of infected birds in soil or grass. As a landscape gardener, our patient was at risk. Clinical presentations of psittacosis vary considerably, but patients usually present with flu-like and respiratory symptoms.[1] Reactive arthritis is unusual, being more commonly associated with pathogens such as *Salmonella*, *Shigella*, *Campylobacter* and *Yersinia* spp.[2] Although reactive arthritis usually involves asymmetri-

cal large joint oligoarthropathies, patients with *Chlamydia psittaci* infection usually have a polyarticular pattern.[3] HLA-B27 has a high association with spondyloarthropathies, including reactive arthritis.

Contact with infected birds is often not obvious, making the diagnosis challenging. Microimmunofluorescence (showing a four-fold increase in antibodies or IgG titre greater than 16) has become available for diagnosis. Differential diagnosis of reactive arthritis includes other causes of arthritis such as sepsis and crystal deposition.

Management of *Chlamydia psittaci* reactive arthritis includes early use of the antibiotics doxycycline or erythromycin, or possibly ceftriaxone.[4] Anti-inflammatory drugs are the mainstay for symptomatic treatment of all reactive arthropathies. Intra-articular steroid injections may be helpful. There is conflicting evidence regarding the benefit of systemic corticosteroids. Sulfasalazine may be a helpful adjunct.[5] For gardeners, preventive measures include the use of masks, gloves and lawnmower catchers.

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