Focus

Reactive arthritis

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The triad of arthritis, urethritis and conjunctivitis known as Reiter's syndrome is indelibly associated with sexually acquired infections. The full triad is not always seen, and the preferred term is now "reactive arthritis", a post-infectious sterile inflammatory arthritis.

Key points

- Most cases of reactive arthritis can be managed in general practice with NSAIDs and physiotherapy
- Specialist referral is indicated for iritis, suspected inflammatory bowel disease, or for patients who do not respond to NSAIDs
- Those who develop chronic arthritis usually need care from a multidisciplinary team

The commonest infective triggers are *Ureaplasma* and *Chlamydia* in the urogenital tract, *Chlamydia* or *Streptococcus* in the respiratory tract, and *Yersinia*, *Salmonella*, *Shigella* or *Campylobacter* in the gastrointestinal tract. In many cases none is found; some are linked to inflammatory bowel disease. Reactive arthritis is one of the seronegative spondyloarthritides (a chronic inflammatory arthritis, negative for rheumatoid factor and linked to HLA B27), so clinical features may be shared with ankylosing spondylitis, psoriatic arthritis, enteropathic arthritis or seronegative rheumatoid arthritis.

The commonest presentation is a young male who develops a migratory inflammatory arthritis of large joints (knee, hip, wrist, ankle) two to four weeks after an infection. The joints are hot, very tender and swollen, sometimes hugely so. The accompanying urethral discharge is sterile and need not be preceded by any urogenital infection. Conjunctivitis, myalgia and skin lesions are common. Keratoderma blenorrhagica, circinate balanitis are classical, sharing histological features with psoriasis, underlining the link between these conditions. Mouth ulcers, enthesitis (eg, plantar fasciitis), dactylitis and tendonitis are less common. Anterior uveitis (iritis), carditis and nephritis are characteristic but rare. There may be systemic features such as fever, weight loss and fatigue.

Testing

Laboratory tests should include a full blood count, differential, rheumatoid factor
and ESR or CRP. Infection should be sought in the respiratory, urogenital and gastrointestinal tracts. The acute phase reactants are usually very high, and can be used to monitor disease activity; leucocytosis or mild anaemia may be seen. The rheumatoid factor should be negative. X-rays are not helpful in the early stages, but may be needed to show sacroiliitis.

Septic arthritis needs to be excluded (especially gonococcus in those with a history to suggest STD). Microbiological tests should be negative by the time arthritis develops (culture of synovial fluid, stool, swabs of cervix, urethra, rectum, throat). An aggressive form of Reiter's syndrome is seen in HIV infection and serological testing should be considered. Bloody or persistent diarrhoea suggests inflammatory bowel disease.

Treatment

The majority of cases will resolve spontaneously, but may take several months. In the small minority that develops chronic arthritis it can be a disabling and damaging condition, often resistant to treatment. NSAIDs are the mainstay in the early phase, but full doses are needed and a strong drug such as indomethacin may be required. Steroid injections are useful to settle persistent problems. Systemic corticosteroids have little place in management.

If the arthritis persists, disease-modifying drugs such as salazopyrin, methotrexate or cyclosporin may be needed. If there is iritis (refer urgently to an ophthalmologist), cycloplegics relieve the pain of ciliary spasm and prevent the formation of synechiae. Despite the infective trigger, antibiotics have not been shown to speed recovery and there is no evidence they prevent relapses in chronic disease. In addition to medical treatment, physiotherapy is helpful to relieve symptoms and reduce disability.