

Discussion

Septic arthritis due to Gram-negative organisms is still relatively uncommon, but there is evidence that the frequency is increasing.¹ Intravenous drug use and impaired host defence are the two most important predisposing factors.^{3,4}

Ceftazidime is a third generation cephalosporin, active against pseudomonas species and was then under trial. In this particular patient it was used because intravenous therapy with bactericidal serum levels of gentamicin and azlocillin had failed to eradicate the pseudomonas infection after five weeks, and this situation usually indicates a very poor prognosis.²

Experience of treating coexisting septic arthritis and crystal induced arthritis is very limited, as this association has been reported on only 13 occasions, five of which were due to Gram-negative bacilli.⁵⁻¹⁴

Intra-articular antibiotics are rarely given in the treatment of septic arthritis, as the penetration of parenteral and oral antibiotics across the synovial membrane into the synovial fluid is said to be good.¹⁵⁻¹⁷ We believe that this is the first occasion that ceftazidime has been administered intra-articularly, and though we have no evidence that it contributed to the eventual successful outcome, we feel this mode of administration should be seriously considered to supplement parenteral or oral therapy when factors such as coexistent pyrophosphate arthritis are likely to make eradication of infection difficult.

This case also illustrates the importance of synovial fluid culture even when crystals have been shown in an acutely inflamed joint.

We would like to thank Glaxo Laboratories Ltd for allowing us to use and supplying us with ceftazidime.

References

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Clinical vignette

Small muscle wasting?

Is it small muscle wasting when you see hollows between the tendons on the back of the hands in rheumatoid arthritis? Depress the tendons and you will probably find that it is not. The extensor tendons often show the sign of 'tendon bridging', since they bridge from the swollen wrist to the swollen metacarpophalangeal joint.

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(Readers are invited to submit brief accounts of new or little known physical signs in rheumatic diseases – Editor.)