

OSTEOMYELITIS IN CHILDREN - A PORTUGUESE HOSPITAL STUDY

C.F. Gouveia, M.J. Brito, G.C. Ferreira, M.C. Machado
Pediatrics, Fernando Fonseca Hospital, Lisbon, Portugal
cfgouveia@clix.pt

Background: Osteomyelitis is a multifaceted disease that continues to present a challenge to physicians.

Objectives: Review the recent experience and outcome of osteomyelitis in children from a suburban area outside Lisbon.

Methods: Retrospective study from July 1, 1996 to March 31, 2003. Demographic, clinical features, complications, laboratory, imagiologic findings and therapeutic measures were analysed.

Results: A total of 20 children were admitted; 10(50%) had acute osteomyelitis and 10(50%) chronic osteomyelitis. The average age was 6,9 years(range 9 months to 14 years). The median duration of symptoms before admission was 5 days in acute osteomyelitis and 180 days in chronic osteomyelitis. Ten patients had risks factors: sickle-cell disease(2), smallpox(1), preceding fracture(3) or paraplegia(1). Nine(45%) had positive cultures for *Staphylococcus aureus*(7), *Pseudomonas aeruginosa*(1), *Candida saprophyticus*(1) and *Mycobacterium tuberculosis*(1). Radiographs revealed osteolytic lesions in 12(60%) patients. MRI findings confirmed diagnosis in 9 cases and skeletal scintigraphy complemented it in 7. The average length of parental therapy was 27 days, followed by oral antibiotics. Surgical procedure was performed in 8(40%) cases. Clinical cure occurred in 12 children. Complications included chronic osteomyelitis(2) and severe osteolytic changes(2). Children with acute osteomyelitis were significantly younger (3 yr vs. 10 yr, $p=0,04$), had higher leucocytes counts (17100 vs. 5200, $p=0,02$) and serum C-reactive protein concentrations (3,9 vs. 0,8, $p=0,02$). There were no differences between groups in bacterial diagnosis or management.

Comments: Despite the longer duration of symptoms prior to diagnosis and the inconsistent use of imaging tests, the overall outcome was similar to those reported by others.

