

Poster presentation

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Chronic Recurrent Multifocal Osteomyelitis (CRMO): four cases treated with aminobisphosphonate (pamidronate)

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CRMO is an autoinflammatory disease of children and young adults, characterized by the insidious onset of local pain and swelling in affected bone and fever. The bone lesions are radiologically characterized as multiple luciens surrounded by defined zones of patchy but dense sclerosis, cortical thickening from periosteal new bone formation, and increased bone size with different bones involved. Diagnosis is based upon laboratory tests (elevated levels of CRP/ESR), bone scintigraphy and MRI findings and is proved by open bone biopsy. Recently bisphosphonate therapy, and particulary i.v. pamidronate, has been proposed as treatment for patients both CRMO who do not responder to NSAIDs therapy. We report 4 cases of children affected by CRMO treated with a therapeutic cycle of aminobisphosphonate (pamidronate). In all pts. the diagnosis of CRMO was confirmed by bone scintigraphy, MRI and open bone biopsy. Pt.1. 12-years-old age (disease onset 10 yrs) presented with pain and swelling of right ankle, hip, knee and breastbone; CRP 2.4 mg/dl, ESR 100 mm/h. CRMO of right distal tibial epiphysis, right peroneal malleolus, breastbone and right hip. Pt.2. 5-years-old age presented with post-traumatic back pain in the past month and pathologic fracture of three thoracic vertebrae; normal values of CRP and ESR. CRMO of right iliac wing and thoracic spine (T8-T9-T10). Pt.3. 8-years-old age presented lumbar pain and swelling in the past month associated with antalgic scoliosis; CRP < 0.5 mg/dl, ESR 40 mm/h. CRMO of left distal tibial epiphysis, thoracic spine (T7-T8), right iliac wing. Pt.4 17-years-old age (disease onset 11 yrs) presented with post-traumatic pain and swelling of right hip and heel; CRP 1.6 mg/dl, ESR 29 mm/h. CRMO of bilateral distal tibial epi-

physis, left calcaneus and neck of right femur. All 4 pts. were treated with 3 infusions of pamidronate 0.5–1.3 mg/kg/day in 250 ml of saline solution i.v. infusion at day 1,3,5 and then monthly. Severe adverse reaction was not found except for low-grade fever and lassitude on the day following administration. In all pts a remarkable improvement of painful symptoms was quickly achieved. MRI performed 1–3 months after treatment showed an important reduction of osteolytic, sclerotic and reactive bone lesions, and normalization of inflammatory values was observed. Our experience suggests that pamidronate maybe an efficacious alternative to conventional treatment in CRMO.