

Poster presentation

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Effectiveness of the treatment with intravenous pamidronate in children with rheumatic diseases

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Introduction

In patients with systemic diseases bone mineral density is diminished due to the underlying disease, the secondary loss of bone mass, the diminution of mobility and the treatment with steroids. Biphosphonates inhibit bone resorption: they produce reduction of the apoptosis in osteoblasts and induce apoptosis in osteoclasts [1,2].

Objective

To value the effectiveness of the treatment with intravenous pamidronate in children with secondary osteoporosis or osteopenia to rheumatic diseases.

Materials and methods

Retrospective analytical study: 22 children, ages between the 4 and 17 years and clinical diagnosis of osteopenia, osteoporosis, calcinosis secondary to rheumatic diseases (Juvenile Idiopathic Arthritis, Systemic Lupus Erythematosus, Juvenile Dermatomyositis, Overlap Syndrome, Panarteritis Nodosa, Familiar Mediterranean Fever). Criteria of inclusion: the patients had to fulfill the criteria of osteopenia and osteoporosis defined according to z-score or bone mineral density; and the diagnostic criteria of the referred diseases. Information about the underlying disease, the treatment received and steroids' dose and duration was collected. The administration of intravenous pamidronate was made according to the protocol established by Glorieux et al.

Results

All the patients treated with intravenous pamidronate presented a significant increase in bone mineral density, clin-

ical improvement, decrease of the number of fractures, reduction in bone pain and improvement of the quality of life. In all the patients with calcinosis a reduction was observed and in one patient it even disappeared.

References

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