[AB1060] BISPHOSPHONATE INTRAVENOUS ALLOWS A RAPID CONTRAST OF PAIN IN COMPLEX REGIONAL PAIN SYNDROME (CRPS)

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Background: The treatment of CRPS remains controversial, but multidisciplinary and interdisciplinary approaches seem to be inevitable to prevent long-standing or permanent disability (1). Bisphosphonates, apart from their antiresorptive activity, could also have other properties through a specific analgesic or anti-inflammatory effect.Bisphosphonate therapy has been shown to be effective in single cases of CRPS (2).
Objectives: to evaluate the efficacyof intravenous compared with intramuscular bisphosphonates in reducing pain in patients with CRPS.
Methods: 14 patients (one male and 13 females; mean age 64.3±8 years) diagnosed with CRPS of carpal and metacarpals bones (confirmed by clinical and MRI) from two weeks, were treated with non-steroidal anti-inflammatory drugs (NSAID), supplemental calcium and Vitamin D, physical therapy and clodronate. Seven patients were treated with iv (Group A) and seven with im clodronate (Group B) for 2 weeks. Then all patients were subjected to im clodronate 100 mg/weekly for 3 months. Pain scales (VAS 0-100) and joint examination were performed before, after one week and after 3 months of clodronate therapy.
Results: pain was 92.7±12 mm in group A and 91±7.5 mm in group B, before starting clodronate (t0). Clodronate reduces pain significantly (p=0.0001) in both groups after one week of therapy, but reduction of pain was significantly higher (p=0.0001) in patients treated with iv clodronate (VAS 21.8±7 mm in group A *vs* 48.2±9.1 mm in group B). After 3months, nostatistical significant difference (p=0.7) in painwas found. Rapid reduction of pain in group A is associated also to a rapid reductionof hyperhidrosis, edema and joint stiffness after one week of therapy.No adverse effects were reported during therapy.
Conclusions: Iv clodronate achieves a rapid reduction of pain compared to im formulation, in patients with CRPS. Early intervention and reduction of pain is also associated with a rapid clinical improvement that might help in the prevention of long-standing disability.
References:
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