

Letters to the Editor

Transient efficacy of pulse pamidronate treatment in active spondylarthropathies: An open study of 35 cases

Sirs,

Bisphosphonates have anti-inflammatory properties (1) and have been tried in the treatment of ankylosing spondylitis (AS) and spondylarthropathies (SpA) (2). In these conditions, pamidronate gave conflicting results in open and comparative dose-response studies performed in different countries (3-7). To better determine the interest of pamidronate in AS or SpA, we performed an open study in patients with active disease.

Thirty-five AS (modified New-York criteria, N= 26) or SpA (European Spondylarthropathy Study Group criteria, N= 9) patients (age (mean $\pm$ SEM): 44 ± 1.8 ; 19 males; disease duration: 14.0 ± 1.9 ; HLA-B27: N=30) with a major complaint of spinal pain were included. They were all non steroidal anti-inflammatory drug refractory and had active disease defined by a Bath Ankylosing Spondylitis Disease Activity Index (BASDAI) $> 40/100$. Some patients were taking second line treatments (sulfasalazine: N= 6, methotrexate: N= 1, azathioprine: N=1; corticosteroids ≤ 10 mg: N= 3). All the treatments had to be stable 3 months prior to study entry. Two patients had concomitant inflammatory bowel disease, 3 had psoriasis, 4 had peripheral arthritis and 12 had syndesmophytes. Pamidronate was administered monthly for 6 months at a 60 mg dosage and infused in 500 ml glucose over 2 hours. The primary outcome was the BASDAI score which was evaluated at baseline and at each subsequent visit. The functional index Bath Ankylosing Spondylitis Functional Index (BASFI) was also recorded. Response according to the ASAS criteria was also analyzed (8). Laboratory assessments included erythrocyte sedimentation rate (ESR) and CRP levels. Patients were evaluated monthly for 6 months and were followed-up for a variable period.

Twenty-seven patients completed the study. Six patients dropped out (1 at month 3, 2 at month 4 and 3 at month 5) for lack of efficacy. Two patients were lost of follow-up after the fourth infusion. The total observation period was 10.8 ± 0.9 months (range 4-24). We observed a progressive decline in

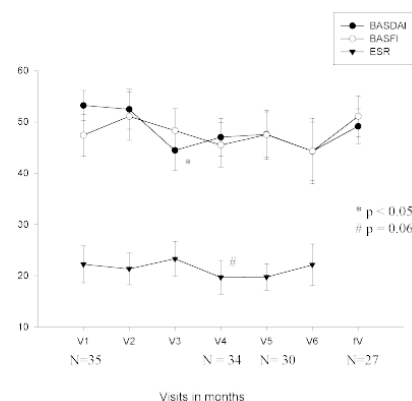


Fig. 1. Evolution of Bath Ankylosing Spondylitis Disease Activity Index (BASDAI), Bath Ankylosing Spondylitis Functional Index (BASFI) and erythrocyte sedimentation rate (ESR) during pamidronate treatment. Patients were treated monthly for 6 months and were followed-up for a mean total observational period of 10.8 ± 0.9 months. Results were expressed as mean $\pm$ SEM (fV: final visit; *: $p < 0.05$; #: $p = 0.06$).

the BASDAI score which was significant from baseline at month 3 (Wilcoxon matched pair test: $p = 0.01$). A 50% BASDAI improvement was noted in 8/35 patients at visit 3, in 6/35 at visit 6 and in 1/35 at the final visit, while only 5 and 1 patients responded to the ASAS 20% criteria at month 3 and 6, respectively. Although BASFI and CRP levels fluctuated during the study, we did not find significant changes between baseline and subsequent visits. Erythrocyte sedimentation rate tended to decrease at visit 4, but the difference with baseline did not reach the significant value ($p = 0.06$) (Fig. 1). Finally, there was no clinical amelioration of peripheral arthritis. Pamidronate infusions were well tolerated with side effects in only 10 cases (28.6%) (fever: N= 5, arthralgia / myalgia: N= 6, conjunctivitis: N= 1, asthenia: N=1). Our study suggested that pamidronate may give a delayed, but transient and mild amelioration of BASDAI and these results were in agreement with previous reports from open studies (6, 7). The conflicting results observed between the different published studies may be related to the dosage and the rhythm of administration of pamidronate which was not the same between the different centres (3-7). In addition, patients may differ by the level of disease activity and disease duration. Despite these discrepancies, we think that pamidronate may be of interest particularly in the cases of active

AS or SpA patients with a BASDAI response at the third month. On the other hand, it does not seem useful to continue pamidronate after this time point in the absence of BASDAI improvement (9). However, to better understand the interest of pamidronate in AS or SpA, a well conducted placebo-controlled trial is required.

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