Arthritis

Babrove, Arthritis and Rheumatism (1983), 2345 reported three patients with inflammatory arthritis, two with rheumatoid arthritis and one with psoriatic arthropathy, who developed seizure disorders necessitating treatment with PHT. Within six months of instituting PHT, all three patients had definite sustained improvement in their joint disease. There was a reduction in morning stiffness, intensity and frequency of clinical flare-ups, as well as reduction in the number of painful and swollen joints. Prior to PHT, all had been taking a nonsteroidal anti-inflammatory drug with only modest benefit.


Georgieff, Arthritis and Rheumatism (1986), 2559 reported a thirty-two week study on the use of PHT in eighteen patients with active rheumatoid arthritis. The patients, thirteen females and five males, ages thirty-five to seventy-two, had arthritis of three-month to ten-year duration. Two of the patients withdrew from the study because of mild side effects, and one because of lack of effect. The starting dose of PHT was 100 mg/day which was increased to 300 mg/day during the course of the study. Clinical and laboratory measurements were made at frequent intervals throughout the study, and during an eight-week period when PHT was withdrawn. Clinical assessments included articular index, clinical score and visual analog pain score. Laboratory measures included serum C-reactive protein, plasma viscosity and hemoglobin. With PHT there was significant clinical improvement. Laboratory improvements attained significance occasionally. There was no relapse of the clinical or laboratory measurements during the eight-week period when PHT was withdrawn.


MacFarlane, Arthritis and Rheumatism (1986), 2749 compared phenytoin and intramuscular gold in rheumatoid arthritis patients. The authors note that the Usefulness of drugs such as gold, penicillamine, azathioprine and cyclophosphamide in rheumatoid arthritis is seriously limited by side effects. Based on their study, the authors suggest that PHT may be an alternative safe therapy for rheumatoid arthritis.

See also Refs. 2816 and 2979 for laboratory studies.


Richards, Arthritis and Rheumatism (1987), 3410 conducted a twenty-four-week study comparing oral phenytoin and intramuscular gold as treatment for patients with active rheumatoid arthritis. Twenty-four patients in both treatment groups completed the study. The initial dose of PHT was 100 mg/day. It was increased by 50 mg each succeeding week until therapeutic levels or side effects occurred. The initial dose of intramuscular gold was 10 mg, followed by 50 mg weekly until clinical response or side effects were seen. At 0, 12 and 24 weeks, blood count, platelets and erythrocyte sedimentation rate (ESR) were checked. Rheumatoid factor and antinuclear antibody were measured. Pain, morning stiffness, and articular index and grip strength were recorded.

For the gold-treated patients, there was significant improvement in all variables except hemoglobin levels. The phenytoin-treated patients showed significant improvement in articular index, ESR, platelets and hemoglobin. The authors suggest that PHT may be a useful additional treatment for rheumatoid arthritis, particularly in patients with progressive destructive disease, but relatively few symptoms.


Naidu, Arthritis and Rheumatism (1991), 3411 treated thirty-five patients with active rheumatoid arthritis with phenytoin in an open trial. For the first month, the dose of phenytoin was 100 mg/day. It was increased thereafter to 200 - 300 mg/day as a single dose. After eight weeks of PHT treatment, early morning stiffness was significantly reduced (p < 0.05). The pain index (p < 0.001), articular index (p < 0.01) and grip strength (p < 0.01) showed significant improvement after twenty-four weeks. There was also a significant reduction in erythrocyte sedimentation rate (p < 0.01). Except for three patients (skin rash in one and gastric irritation in two), phenytoin was well tolerated.


Rao, Arthritis and Rheumatism (1995), 3412 evaluated phenytoin's efficacy, comparing it to that of gold (Auranofin) and chloroquine in a double-blind randomized study of 132 patients with active rheumatoid arthritis (RA). RA evaluation included anatomical stage (AS), functional class (FC), pain index (PI), swelling index (SI), walking time (WT), morning stiffness (MS), grip strength (GS), a visual analogue scale for pain, rheumatoid factor titers (RF), C-reactive protein (CRP), erythrocyte sedimentation rate (ESR), immunoglobulins (IgG, IgA and IgM), phenytoin levels and global outcome. Evaluation was performed every month for six months.

Full data were obtained for 108 patients who completed the protocol: forty received phenytoin (100 mg bid); thirty-two, Auranofin (3 mg bid); and thirty-six, chloroquine (75 mg bid). The authors found that each of the three drugs improved all the clinical and laboratory parameters measured when pre- and post-treatment values (p < 0.05 to 0.001) were compared. Post-treatment mean morning stiffness in the chloroquine group was less than in the phenytoin and Auranofin groups. Post-treatment grip strength was also greatest in the chloroquine group. On the other hand, there were statistically significant decreases in IgM levels in both the phenytoin and Auranofin groups (p < 0.001), but not with chloroquine. Among the 53 patients with acute or subacute onset of RA, global outcome was best with phenytoin (16/17), compared to chloroquine (12/18) and Auranofin (12/18) (p < 0.03). However there was no difference in the forty-seven patients in all three groups with a chronic disease status. Eight patients had side effects (phenytoin, five; Auranofin, two; and chloroquine, one) requiring withdrawal of the drug. However, the incidence of side effects was not significantly different for the three drugs.

Based on their data, the authors concluded that phenytoin is comparable to Auranofin and chloroquine in its efficacy in RA and can thus be considered as an alternative disease-modifying agent for RA. Phenytoin has an added advantage of being very economical compared to oral gold-containing compounds for long-term therapy.

See also Ref.