Drug eruption due to alendronate sodium hydrate

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Key words: alendronate; cutaneous adverse drug reactions; positive lymphocye stimulation test; positive scratch-patch test.

Case Report

A 72-year-old woman had had osteoporosis for over 3 years, and had received drug therapy (alfacalcidol) in our hospital for 3 years. She was seen in December 2001 with numerous red papules and petechiae on the lower extremities that had started 10D before. She had been taking alendronate sodium hydrate (Fosamac®: Banyuu, Tokyo, Japan) 5 mg once a day orally for 3 weeks, in addition to alfacalcidol 0.5 μg once a day.

We performed patch tests and scratch-patch tests with 20%, 10%, 1%, and 0.1% pet. alendronate sodium hydrate and 3 excipients in Fosamac. Only scratch-patch tests with 20% and 10% pet. alendronate sodium hydrate produced erythema and papules with pruritus at D2 and D3. Patch tests and scratch-patch tests with 20% and 10% pet. alendronate sodium hydrate in 6 control subjects showed no reactions at D2 or D3. LST (lymphocyte stimulation test) with alendronate sodium hydrate was positive (stimulation index (SI) = 4.0, normal SI < 1.8).

Discussion

Several bisphosphonates, including alendronate, are effective antiresorptive agents for the prevention and treatment of osteoporosis as well as for the treatment of Paget's disease

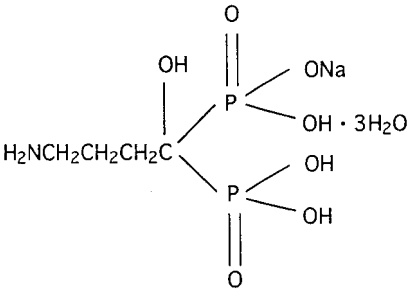


Fig. 1. Chemical structure of alendronate sodium hydrate.

of bone, myeloma, and bone metastasis (1, 2). They have strong antiosteoclastic activity and increase bone mineral density (2). Alendronate has been used in Europe and the USA (Fosamax) since 1995 and in Japan since 2001. It causes mainly gastrointestinal-tract adverse effects, e.g. abdominal pain, esophagitis, and esophageal ulcer (3), while drug eruption due to alendronate sodium hydrate is rare. Only 1 case with an urticarial drug eruption from alendronate has been reported (4). The structure of alendronate sodium hydrate is shown in Fig. 1.

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Septic arthritis as a complication of allergic contact dermatitis

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Key words: Basic Red 46; clothing dermatitis; occupational; socks

Case Report

A 32-year-old concrete caster presented with a 16-month history of severe work-related foot and ankle dermatitis. He was exposed at work to concrete dust and a mould-releasing oil, the latter contaminating his lower legs and leather boots.

One month earlier, he had developed left ankle pain, and been found to show overlying erythema and reduced range of movement, with a raised WBC and ESR. Culture of aspirated joint fluid grew *Staphylococcus aureus*, and a septic arthritis of the left ankle joint was diagnosed and treated with prolonged intravenous antibiotics.

He was patch tested using Finn Chambers® on Scanpor® tape (Epitest, Tuusula, Finland), to an extended European standard series, a rubber series, Chemotechnique (Malmö, Sweden) textile dye series, and samples of the mould-release oil and his boots and socks (soaked in both oil and water). There were positive reactions to Basic Red 46 1% pet. (+ + +) and ethylenediamine 1% pet. (+ +), and equivocal reactions to his blue socks soaked in water and the inner leather from his own work boots soaked in water. There was no reaction to potassium dichromate 0.5% pet. and 0.25% pet.

Discussion

Basic Red 46 is used in the dyeing of acrylic products, including socks, and was not found to have been used in the patient's leather work boots. We suggest that he may have been exposed to Basic Red 46 in acrylic work socks and that this dye may also have leached into the leather of his work boots. The positive patch

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