

## Journal Watch

### **Reactions associated with bisphosphonates: A report of 3 cases and an approach to management.**

Phillips E, Knowles S, Weber E, Shear N. *Skin J Allergy Clin Immunol* 1998;102:697-8.

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#### **Summary:**

Allergic or skin reactions of any type or severity associated with bisphosphonates have been estimated to occur in less than 1% of patients. 3 case studies are reported of cutaneous reactions with bisphosphonates in 3 different female breast cancer patients (40-51 years old) from Sunnybrook Health Science Centre in Toronto from March - December 1997.

#### Case 1:

Pamidronate 60 mg IV - Day 4 pruritus and hives. Prick and intradermal testing negative. Challenged at 7 months with 1/10th dose IV & after 30 minutes stopped infusion due to pruritus and hives. 2 weeks later, po clodronate given with no untoward reaction.

#### Case 2:

Third dose of pamidronate 90 mg IV - 8 hours later pruritus and hives for 2 days. Fourth dose of pamidronate 90 mg IV given and 8 - 12 hours later, pruritus and hives for 2 days. Prick and intradermal testing negative except for 3 mg/ml irritant concentration. Challenged with 1 X 10 mg po alendronate - tolerated. No further therapy.

#### Case 3:

Pamidronate 60 mg IV in November, clodronate 300 mg IV in December. 2 hours later, pruritus, hives and tightness in chest for 1 day. Prick and intradermal testing negative except for 3 mg/ml irritant concentration for both clodronate and pamidronate. Desensitized to clodronate and continued on po.

#### **Comments:**

##### Strengths:

Subsequent to a patient in our region developing a reaction to bisphosphonates, the Regional Drug Information Centre of the CHA did a literature search and this is the only report they could find on the issue.

##### Weaknesses:

The challenge/desensitization protocol given is for maintenance of patients on oral clodronate.

##### Relevance to Palliative Care:

A negative skin test reaction does not confirm a past or predict a future IgE mediated reaction. A positive skin test response to a non-irritant concentration (< 3 mg/ml of either

pamidronate or clodronate) would have suggested the formation of IgE antibodies to bisphosphonates. The usefulness of skin testing for bisphosphonates will require further testing.