

boxymethylcellulose has previously been reported. To avoid further problems, this patient was advised to alert medical staff for the presence of allergy to carboxymethylcellulose in the event of the need for further interventional procedures. Care should be taken when giving intradermal steroids to patients with a history of anaphylaxis after contrast media.

Key words: carboxymethylcellulose; corticosteroids; intralesional injection; vehicle.

A 24-year-old man with localized alopecia areata was reviewed in the dermatology outpatient clinic. He had a background history of asthma. There was no history of drug or food allergy. He was treated with an intralesional injection of 0.3 ml of triamcinolone acetonide as topical steroids had not been effective. On intradermal injection of the corticosteroid, he immediately developed lip swelling, wheezing, and an urticarial rash. He was transferred to the emergency department and responded to 100% O₂ via face mask, 10 mg of chlorpheniramine, and 100 mg of hydrocortisone intravenously. His recovery was uneventful. Skin prick testing later carried out to the ingredients of the injection showed a 2+ response to carboxymethylcellulose at a dilution of 1/1000, but no reaction to sterile triamcinolone acetonide or normal saline (the dilution vehicle for the separate ingredients). Skin prick tests are graded according to the presence and diameter of wheal and flare reaction. A 2+ response denotes a 2–3 mm wheal with flare. Carboxymethylcellulose was therefore implicated as the responsible agent for the anaphylactic episode. This is a dispersant in corticosteroid preparations. Anaphylaxis secondary to carboxymethylcellulose has previously been reported in the literature (1), not only from parenteral steroids but also from radiographic contrast media (2).

A similar anaphylactic reaction to intralesional injection of triamcinolone acetonide has been reported; however, the reaction did not include shortness of breath and the specific causative agent was not investigated. Like the above case, this patient had a history of atopy (3). There are also reports of intra-articular corticosteroid injections causing anaphylactic reactions (4, 5).

Carboxymethylcellulose is a hydrophilic derivative of cellulose found

Anaphylactic reaction to intralesional corticosteroid injection

Contact Dermatitis 2007; 57: 132–133

M. E. Laing¹, B. Fallis² and G. M. Murphy¹

¹Department of Dermatology, and

²Department of Medicine, Beaumont Hospital, Duldin 9, Ireland

We report the case of anaphylactic reaction to carboxymethylcellulose, a dispersant in corticosteroid preparation and contrast media. Skin prick testing in this patient revealed a positive response to carboxymethylcellulose at a dilution of 1/1000. Anaphylaxis secondary to car-

in many food products, pharmaceuticals and cosmetics. In the case of anaphylaxis after injection of corticosteroids, carboxymethylcellulose in addition to corticosteroids should be included for allergy testing. To avoid further problems, this patient was advised to alert medical staff for the presence of allergy to carboxymethylcellulose in the event of the need for further interventional procedures. Care should be taken when giving intradermal steroids to patients with a history of anaphylaxis after contrast media.

It is advisable to keep a resuscitation kit in the dermatology outpatient clinic and to ensure staff are trained to enable competency in the treatment of cases of anaphylaxis.

References

1. Bigardi P L, Izakovia J, Weber J M, Bircher A J. Anaphylaxis to the carbohydrate carboxymethylcellulose in parenteral corticosteroid preparations. *Dermatology* 2003; 207: 100.
2. Muroi N, Nishibori M, Fujii T et al. Anaphylaxis from the carboxymethylcellulose component of barium sulfate suspension. *N Engl J Med* 1997; 337: 1275–1277.
3. Bantick G. Anaphylactic reaction to intralesional steroid injection. *Plast Reconstr Surg* 2006; 117: 336.
4. Mace S, Vadas P, Pruzanski W. Anaphylactic shock induced by intraarticular injection of methylprednisolone acetate. *J Rheumatol* 1997; 24: 1192.
5. Larson L. Anaphylactic shock after i.a. administration of triamcinolone acetate in a 35-year-old female. *Scand J Rheumatol* 1989; 18: 441.

Address:

Dr Mary Elizabeth Laing
Department of Dermatology
Beaumont Hospital
Dublin 9
Ireland
Tel: +353 1 8093000
Fax: +353 1 8093874
e-mail: mrylaing@yahoo.co.uk