

mean 8) (aged 2 months to 10 months) were studied (3).

All of the AE patients were treated with application of pinetar (Yoshida Pharmaceutical Co. Ltd, Tokyo, Japan), but without oral medication (3). Before and after avoidance of latex products for 2 months, skin prick test (SPT) to latex and poinsettia was performed with natural rubber latex extract and red leaves of poinsettia by prick-prick, respectively (3). Wheal responses >2+ compared with histamine-induced wheal are considered positive (3). Blood was also sampled and serum latex-specific IgE was measured by FEIA. This study was approved by the ethical committee of the Moriguchi-Keijinkai Hospital.

As shown in Table 1, two patients were allergic to poinsettia leaves and latex, while none of healthy infants were allergic to them. On the other hand, all of the AE infants with LA were allergic to poinsettia leaves, while none of AE infants without LA were so. Avoidance of latex products significantly decreased sensitization to poinsettia or latex in patients and AE infants with LA. In Japan, incidence of sensitization to LA in AE infants was increasing (4). Care should be taken in using poinsettia in family with AE patients.

\*Department of Allergy, Moriguchi-Keijinkai Hospital, 2-12-47 Moriguchi City Osaka Prefecture, 570-0021 Japan  
Tel: +81-6-6906-9000  
Fax: +81-6-6906-9500  
E-mail: kimata-keijinkai@mkc.zaq.ne.jp

Accepted for publication 29 September 2006  
Allergy 2007; 62:91–92  
© 2007 The Author  
Journal compilation © 2007 Blackwell Munksgaard  
DOI: 10.1111/j.1398-9995.2006.01262.x

**References**

- Ibanñez MD, Nieto-Fernández M, Martínez J, Gerdona GA, Guisantes J, Quirce S et al. Asthma caused by latex from 'Christmas flower' (*Euphorbia pulcherrima*). *Allergy* 2004;**59**:1127–1128.
- Bala TM, Panda M. No poinsettia this christmas. *South Med J* 2006;**99**:772–773.

- Kimata H. Latex allergy in infants younger than 1 year. *Clin Exp Allergy* 2004;**34**:1910–1915.
- Kimata H. Increased incidence of latex allergy in children with allergic diseases in Japan. *Public Health* 2005;**119**:1145–1149.

**Anaphylactic shock after oral intake and contact urticaria due to polyethylene glycols**

H. B. Co-Minh\*, P. Demoly, B. Guillot, N. Raison-Peyron

We reported an anaphylaxis after oral intake and contact urticaria due to polyethylene glycols.

**Key words:** allergy; anaphylaxis; macrogol; polyethylene glycol; urticaria.

Polyethylene glycols (PEGs) or macrogols are hydrophilic substances used in many drugs and cosmetics. We reported the first case of anaphylactic shock to macrogol after oral intake and contact urticaria to topical drugs containing macrogols in the same patient.

A 58-year-old man consulted for an anaphylactic shock in 2002 30 min after oral intake of citrate de betaine UPSA® effervescent tablets (UPSA, Agen, France) for dyspepsia. He reported also several reactions of immediate contact urticaria after using corticosteroid creams betneval® (betamethasone valerate; GlaxoSmithKline, Marly-le-Roi, France) and nerisone® (diflucortolone valerate; Schering SA, Lys-lez-Cannoy, France) in 2005 for an eczema. In 1995, he presented a maculopapulous exanthema after oral intake of penglobe® (bacampicillin; AstraZeneca, Rueil-Malmaison, France). **He was considered to be allergic to aminopenicillins.**

Patch testing with the European standard series, corticosteroid series and the used topical drugs were all negative at 30 min, 48 and 72 h (except Myroxylon Pereirae and fragrance mix with a past relevance).

Then, we performed prick tests. They were positive for BETNEVAL® and NERISONE® creams but negative for

the corticosteroids themselves at 30 min. The only two common ingredients of these creams were macrogol (cetomacrogol 1000 in BETNEVAL® cream and macrogol stearate 40 in NERISONE® cream) and stearyl alcohol.

Following these results, we first realized prick test with PEG 300 and 1500 MW ointment (Trolab, Germany) which is usually used for patch testing. It was positive at 30 min. We also performed prick tests with forlax® (Beaufour Ipsen Pharma, Paris, France) a drug whose active principle is macrogol 4000 and with aetoxysclerol® (Kreussler Pharma, Roissy-Charles-de-Gaulle, France) which is lauromacrogol 400, both diluted to 1/10 in water. They were positive at 30 min whereas prick test to stearyl alcohol was negative.

Several weeks later, the patient underwent a single-blind placebo-controlled oral challenge with citrate de betaine beaufour® (without macrogol, Beaufour Ipsen Pharma, Paris, France) unlike citrate de betaine UPSA® which contained macrogol 6000. This test was negative. Our patient was probably not allergic to bacampicillin but to macrogol 6000 present in penglobe® (not available nowadays) because allergological tests to penicillins (including oral challenge to ampicillin) were negative.

We concluded to an immediate hypersensitivity to macrogol or PEG. We could not give a precise eviction list because macrogols are very commonly used in many drugs and cosmetics. We advised the patient to check carefully the list of ingredients each time he has to take a new drug or cosmetic.

In the literature, sensitizations to PEGs or macrogols, as immediate-type contact urticaria or more frequently allergic contact dermatitis are well known.

Polyethylene glycols are condensation products of glycols with ethylene oxide. Their chemical formula is HO (CH<sub>2</sub> CH<sub>2</sub>)<sub>x</sub> OH. Their molecular weights varied from 200 to 700 Da in a liquid form to 1000–6000 Da in a solid form, according to the condensation degree. Polyethylene glycols of weak molecular weight (200–400 Da) have a greater sensitization capacity (1). Our patient had immediate reactions both **to weak and high-molecular weight PEGs**, which is not usual.

Polyethylene glycols are used as solvent and excipient in topical or systemic drugs, as active principle of drugs, in electrodes gels, insect repulsives, cosmetic and hygiene products, cutting fluids, glue and epoxy hardeners (plasticizers; 1). There are many PEGs derivatives, such as cetomacrogol, lauromacrogol, nonoxynol.

One case of anaphylaxis to macrogol after an intra-articular injection of corticoid has been reported (2). We found rare reports of bronchospasm, anaphylaxis, urticaria or angioedema after ingestion of PEGs solutions for preparation before coloscopy but no allergological exploration was made (3).

This observation underlined that allergy to excipients even if it is a rare event should be considered, a fortiori if there are multiple allergic reactions. To our knowledge, it is the first case of anaphylactic shock to macrogol after oral intake and **contact urticaria to topical drugs containing macrogols in the same patient.**

\*Dermatology Unit  
St-Eloi Hospital  
80 avenue Augustin Fliche  
34295 Montpellier cedex 5  
France  
Tel: +33 467 336956  
Fax: +33 467 336958  
E-mail: hcominh@yahoo.fr

Accepted for publication 1 October 2006  
Allergy 2007; 62:92–93  
© 2007 The Authors  
Journal compilation © 2007 Blackwell  
Munksgaard  
DOI: 10.1111/j.1398-9995.2006.01265.x

**References**

- Rietschel RL, Fowler JF Jr. *Fisher's contact dermatitis*. Philadelphia: Lippincott Williams and Wilkins, 2001:235.
- Dewachter P, Mouton-Faivre C. Anaphylaxis to macrogol 4000 after a parenteral corticoid injection. *Allergy* 2005;**60**:705–706.
- Stollman N, Manten HD. Angioedema from oral polyethylene glycol electrolyte lavage solution. *Gastrointest Endosc* 1996;**44**:209–210.

**Sulfonamide allergy without cross-reactivity to celecoxib**

J. Figueroa\*, N. Ortega, L. Almeida, C. Blanco, R. Castillo

**Key words:** celecoxib; cross-reaction; cross-sensitization; drug allergy; sulfonamides.

Cross-sensitization between sulfonamides and celecoxib has been discussed in the last years (1–4), although a real cross-reactivity between them has not been demonstrated.

We report here five patients with sulfamethoxazole allergy confirmed by single-blind placebo-controlled oral challenge (SBPCOC) who tolerated oral challenge tests with celecoxib. We recruited patients that had been diagnosed of sulfonamide allergy confirmed by a positive oral provocation test in the last 4 years. Five patients were included in the study after obtaining written informed consent. The mean age of the sulfonamide allergy group of patients was 32 ± 12.21 years (mean ± SD), with a predominance of females (4 : 1), and all of them had a history of sulfamethoxazole allergy confirmed by SBPCOC as shown in Table 1. We performed SBPCOC with celecoxib reaching a cumulative dose of 200 mg obtaining a negative result in all patients.

Celecoxib is usually avoided in patients who have demonstrated allergic reactions to sulfonamides although there is a controversy about possible cross-reactions between sulfonamides and celecoxib. In fact few cases of clinically relevant possible cross-sensitization between these

Table 1. Clinical characteristics of sulfonamide allergy patients

Patient number	Age (years)	Sex	Clinical symptoms in sulfamethoxazole oral challenge
1	17	Female	Urticaria
2	45	Female	Urticaria
3	25	Male	Anaphylaxis
4	44	Female	Urticaria
5	29	Female	Angioedema

two drugs have been reported in literature.

Celecoxib is a sulfonamide-containing drug without an aromatic amine and without a substituted ring at the N1-position, so it is chemically distinct from the arylamine sulfonamide antimicrobials, and these differences are responsible of the lower potential for causing hypersensitivity reactions of celecoxib (2, 3). A meta-analysis of 14 double-blind studies showed that celecoxib, nonsulfonamide-containing nonsteroidal anti-inflammatory drugs and placebo have comparable potentials for cross-reactivity with sulfonamide-containing drugs (4).

In this study, no cross-sensitization between celecoxib and sulfamethoxazole was found. Although further investigations are necessary, scientific data at the moment show no evidence to avoid using celecoxib in patients with a known sulfonamide allergy, at least until possible cross-reaction could be confirmed by an oral challenge with the cyclo-oxygenase-2 inhibitor agent.

\*Hospital Universitario Insular de Gran Canaria  
Allergy Section  
Avda Marítima del Sur s/n none Las Palmas de Gran Canaria 35016  
Tel: +34 928 441416  
Fax: +34 928 441869  
E-mail: jafiri@hotmail.com

Accepted for publication 10 October 2006  
Allergy 2007; 62:93  
© 2007 The Authors  
Journal compilation © 2007 Blackwell  
Munksgaard  
DOI: 10.1111/j.1398-9995.2006.01270.x

**References**

- Schuster C, Wüthrich B. Anaphylactic drug reaction to celecoxib and sulfamethoxazole: cross reactivity or coincidence? *Allergy* 2003;**58**:1072.
- Knowels S, Sahapiro L, Shear NH. Should celecoxib be contraindicated in patients who are allergic to sulfonamides? *Drug Saf* 2001;**24**:239–247.
- Clemett D, Goa KL. Celecoxib: a review of its use in osteoarthritis, rheumatoid arthritis an acute pain. *Drugs* 2000;**59**:957–980.
- Patterson R, Bello AE, Lefkowitz J. Immunologic tolerability profile of celecoxib. *Clin Ther* 1999;**21**:2065–2079.