A rare case of allergy to alginate impression material

Objective

Irreversible hydrocolloids, also known as alginates have been widely considered as safe and biocompatible impression biomaterials. So far, one case of anaphylaxis after an alginate impression has been reported.

The objective of this case report is to document alginate allergy and thus, avoid such allergic manifestations in dental clinic and manage them.

Case description

A 78-year-old female patient with prior history of food allergies, food colourings and flavourings in particular, stated allergic manifestations after having an alginate dental impression. Latex allergy has been previously excluded.

The patient had a number of symptoms as follows: oral mucosa itching and redness; and tongue swelling, they appeared about 30 minutes after the contact.

As a symptomatic treatment, antihistamine medication was prescribed: Polaramine 2 mg tablets (Dexchlorpheniramine maleate), one tablet per day.

After taking the medication for three days the allergic manifestations disappeared.

Few months later, denture repair was needed, the procedure required an alginate impression and was performed under antihistamine medication. No allergic reaction was observed.

Discussion:

As the patient had history of allergic reactions to food flavouring and colouring, the the allergen appears to be the purple colouring of the paste and/or the raspberry flavouring.

The patient was asked to have a Polaramine® tablet prior to each session using coloured products, and ne reaction was triggered

Although alginate allergy is exceptional, one case reported in the literature of a deadly anaphylaxis due to a dental impression. It has been observed in our dental clinic in a patient with atopic history.

A comprehensive questioning of the patient in search of their allergy history and a clinical assessment following contact with the allergen are essential for preventing the kind of consequences that could alter the patient's prognosis.

Key words: Alginate; Allergy; Dental impression