

How Should a Pediatric Dentist Deal with Allergic Reactions?

Karimi M*

Department of Pediatrics Dentistry, Sepideh Dental Clinic, Iran

***Corresponding Author:** Karimi M, Department of Pediatrics Dentistry, Sepideh Dental Clinic, Iran.

Received: August 29, 2020; **Published:** October 12, 2020

Allergic reactions include increased immune responses to antigens that have been diagnosed as foreign, and subsequently form antibodies. There are various types of allergic responses, but the type I (immediate) hypersensitivity reactions, which are of particular importance in dental offices, will be discussed below.

The anaphylactic reaction is mainly caused by the release of histamine from the sensitized mast cells, although other inflammatory mediators also play a role. Histamine is a potent androgen substance, which causes inflammation and vascular effects.

Systems of the body that are primarily involved in clinical allergic reactions include the skin, respiratory system, and cardiovascular system. Skin involvement is the most common reaction and can range from mild erythema rash to itching and generalized swelling.

Type I is IgE-dependent reactions ranging from mild to severe delayed rash with sudden and life-threatening anaphylactic shock. A pediatric dentist should note that the main drugs that may cause an allergic reaction for children in pediatric dentistry include Penicillins and possibly topical amide anesthetics. It should be kept in mind, however, that amide-based anesthetics rarely cause allergic reactions, but sulfite antioxidants present in vasoconstrictor-containing anesthetics may cause an allergic reaction.

As a general rule, the faster the symptoms develop, the stronger the reaction can also be expected. The management of allergic reactions depends on the duration and severity of the symptoms. If the symptoms are severe, immediate or progressive, and the dentist feels the life-threatening conditions, such as generalized swelling and difficulty breathing, epinephrine is given intramuscularly.

Repeated doses of epinephrine are almost certainly needed. In some cases of administration high doses, preferably intravenously this is required to be done by trained personnel.

Epinephrine counteracts most of the effects of histamine. Oxygen should always be prescribed, especially if there are any respiratory symptoms. For mild allergic reactions, such as skin rash or a few hives, the pediatric dentist may prescribe a histamine receptor blocker, such as Diphenhydramine, IM or orally for children, in diagnosed doses.

Volume 9 Issue 11 November 2020

© All rights reserved by Karimi M.