

Anaphylactic Reaction to Chlorhexidine After Plantar Fasciitis Injection

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We performed a chart review and patient interview. A 48-year-old male presented to his podiatrist's clinic for a therapeutic injection into his foot to manage plantar fasciitis. The patient had no known allergies to medications or topical agents and had no history of adverse reactions during previous medical procedures. Prior to injection, chlorhexidine with alcohol was used at the injection site as part of routine preparation. A mixture containing triamcinolone, Lidocaine and Marcaine was then injected. A few minutes after the injection, the patient experienced an abrupt onset of severe symptoms, including diaphoresis, acute dyspnea, chest tightness, and altered mental status. The medical team immediately called for an emergency response, and he was subsequently transferred to a nearby hospital where he required intubation and circulatory support with intravenous fluids, epinephrine, corticosteroids, and antihistamines resulting in the patient's stabilization. He was later discharged well. Anaphylactic reactions to chlorhexidine are rare, and their true incidence is unknown. The first case of anaphylaxis to chlorhexidine was reported in 1984 in Japan.³ Although anaphylaxis is rare, allergy to chlorhexidine is relatively common as seen in areas that test for it. Allergic reactions to chlorhexidine are often preceded by milder reactions such as localized or generalized urticaria. Such incidents were not found in this patient but may have been overlooked.

Undervaluation of previous chlorhexidine reactions increases the risk of a possibly fatal outcome for the patient after reexposure in future medical-surgical procedures.^{4,5} While chlorhexidine is probably the best disinfectant available and the benefits are unquestionable, it is important to be aware of its allergenic potential and to use it only when necessary. Given the potential risk, it is imperative that healthcare providers question patients regarding allergies specifically to cleaning solutions, such as chlorhexidine, in addition to medications. It is also imperative to only use chlorhexidine only when needed to limit allergic sensitization

Afterwards, the patient followed up with an allergist and had negative skin tests, negative drug challenges and undetectable specific IgE to triamcinolone, lidocaine and bupivacaine. The testing facility at New Orleans VA Medical Center was unable to test chlorhexidine specific IgE, but given the lack of response to the other drugs and no other materials used, it was deduced that chlorhexidine was the likely culprit. The patient has subsequently had injections with triamcinolone, lidocaine, and bupivacaine without issue. Chlorhexidine has been avoided