Anaphylactic reactions to local anesthetics.

Abstract:

Local anesthetics (LA) are common elicitors of adverse reactions and the clinical symptoms often correspond to anaphylaxis with tachycardia, hypotension and subjective feelings of weakness, heat or vertigo. The pathomechanism of immediate hypersensitivity reactions to LA is largely unknown -they are commonly regarded as 'pseudo-allergic' or 'non-immune type' anaphylaxis. Immunologically mediated reactions have rarely been observed with positive skin prick tests. Other ingredients in LA preparations have to be considered as elicitors, e.g. preservatives like benzoates or sulfites or latex contaminants in injection bottles. Practical management of patients with a history of LA reaction includes a careful allergy history, skin-prick and intradermal tests. Undiluted LA solutions may elicit false-positive intradermal test reactions. If prick and intradermal tests are negative, the procedure of subcutaneous provocation testing is applied in a placebo-controlled manner. When patients are constantly reacting to placebo, a regimen of reverse placebo provocation' with injection of a LA (verum) is applied while the patient is informed about receiving placebo in order to 'rule out psychosomatic involvement'. With this regimen it is possible to eliminate anxiousness and fear, and the patient has proof that he has tolerated the respective LA substance.