

# The problem of hypersensitivity to local anesthetics

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**ABSTRACT.** The problem of the development of adverse reactions as a result of the use of diagnostic and medicinal products (drugs) in medicine is becoming increasingly important. Patients more often note reactions to local anesthetics (LA) – 43.2 %, antibiotics – 18.8 %, nonsteroidal anti-inflammatory drugs – 9.7 %, other drugs – 28.4 %. LA include two chemical groups: esters of benzoic acid (Ester-type anesthetics), which are potentially allergens, and amides (Amide-type anesthetics), which have virtually no allergenic potential. Based on the history for doctor is often difficult to assess the risk of allergic reactions, so if in the past the patient had a side effect of LA, then these drugs should be skin and provocative tests, having obtained the informed consent of the subject to conduct them. Skin prick tests are used for initial diagnosis in patients with suspected LA allergy. If the results of the pre-test and intradermal test are negative, a subcutaneous challenge test with LA is performed. Skin testing for suspected hypersensitivity (HS) of the delayed type begins with application (patch) tests and only with a negative result using an intradermal test with LA. Laboratory methods for diagnosing HS to LA are used much less often than skin and provocative tests, because for many drugs the appropriate methods have not been developed, as well as because it is a time-consuming and expensive method of diagnosis. Therapeutic tactics in the event of HS to LA include providing patients with emergency care in the development of anaphylaxis and treatment of other clinical manifestations of HS reactions in accordance with existing international and domestic protocols. Epinephrine, oxygen therapy, colloid/crystalloid infusions, antihistamines, systemic and topical corticosteroids, protease inhibitors, inhaled  $\beta_2$ -agonists, leukotriene receptor antagonists, etc. are most commonly used for this purpose.

**KEY WORDS:** hypersensitivity, local anesthetics, diagnosis, treatment.

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