Skin Testing After Anaphylactoid Reactions

Buff Maycock

Department of Anaesthesia Princess Alexandra Hospital, Brisbane, Queensland, Australia

This presentation will describe skin testing and how we use it to investigate patients who have had a possible anaphylactic reaction during anaesthesia.

When a patient has an anaphylactoid reaction during an anaesthetic, it is important that the anaesthetist informs the patient of the reaction. The anaesthetist should discuss the possible causes, and which tests should be performed. The anaesthetist also needs to explain to the patient what the tests involve, how reliable they are, who will be performing them and when they will get the results. They also need to convey to the patient that the tests may not be conclusive and false positive and negative results can occur.

The two recognised tests used to investigate anaphylactoid reactions during anaesthesia are serum Tryptase and skin testing. The timing of both investigations is important. The first serum Tryptase should be taken within the first two hours of the reaction, a second should be taken at 4 hours and a third sample should be taken as a baseline anytime after 24 hours.

The method of skin testing varies depending on whether an anaesthetist, allergist or immunologist performs it. It can involve prick testing &/or intradermal testing. The protocols for skin testing in Australia and New Zealand are based on Malcolm Fisher’s recommendations\(^1\) and Laxenaire's work\(^2\).

This paper will discuss the recommended management and investigation of these patients in Australia and New Zealand, look at who is performing skin testing and the practical aspects of how it is done with example cases.

It is hoped that after this presentation anaesthetists will know how to investigate patients who have possible anaphylaxis during anaesthesia and they will be able to explain these tests to their patients so the patients will have realistic expectations.

\(^1\) Malcolm Fisher 1984, \(^2\) Laxenaire 1998