



# To crack a nut with a sledgehammer: premedication in a patient with a history of mild symptoms following the injection of a contrast agent

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Numerous papers point to the fact that an “iodine allergy” does not exist (1-4). Nevertheless, patients and physicians still use this term. This can be problematic as shown in the following case report.

A female patient with aortic dissection type A acquired five minutes following the injection of the non-ionic iodinated contrast medium (ICM) iopromide a generalized itching, which disappeared without any treatment. During a period of 22 years, she regularly received 1 mg clemastine (Tavegyl®) and 125 mg methylprednisolone (SoluMedrol®) as intravenous premedication, because the index reaction (ICM-induced itching) has been documented in the electronic patient record RIS as “iodine allergy”.

Itching is a common adverse reaction following the injection of a contrast medium which does not harm the patient and which usually disappears without anti-allergy drug treatment. Without additional symptoms, itching is a so-called type A reaction (5). Itching with concomitant other symptoms such as urticaria, angioedema etc. is an alleged type B (hypersensitivity) reaction (5).

This case is both noteworthy, and of educational relevance because of the following facts.

First, the case is an example for a non-correct documented ICM-induced adverse reaction. Instead of “itching following the application of iopromide”, the electronic record mentions “iodine allergy”. As stated previously, the exact documentation is an important prerequisite for effective prophylactic measures in future (6).

“Iodine allergy” is a problematic diagnosis, because this form of allergy does not exist (1-4). Consequently, an exact

definition of this term is missing.

An adequate and rational prophylaxis based on a not existing diagnosis is impossible (7). Consequently, a drug pre-treatment by using a H1-blocker plus corticosteroid is an overtreatment with respect to the clinical symptom of the index reaction. Moreover, a premedication with H1-antihistaminic plus corticosteroid is more harmful than the mild symptom ‘itching’. Therefore, it is useful to consider other preventive measures such as omission of the culprit ICM, and application of a non-culprit agent (8).

Taken together, the presented case shows that regular education of both, radiologists and technical assistants is very important to ensure the correct documentation, and the correct diagnosis of ICM-related adverse reactions, for example. Moreover, the exact documentation/diagnosis is the prerequisite for a safe and adequate prophylaxis in patients at risk.

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## Footnote

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aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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