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Reply to: "Include desensitization to radiocontrast media in the diagnostic algorithm"

To the editor,

I thank Dr Alnaes for her stimulating comment on my medical algorithm on the Diagnosis and Treatment of Radiocontrast Media Hypersensitivity.¹ In her comment, she raised attention to the possible addition of desensitization to radiocontrast media (RCM) management, which was not depicted in the algorithm.² I have been well aware of several reports on desensitization and have already discussed them in a previous paper. In this article, I commented that "successful desensitization of RCM has been reported for immediate hypersensitivity reactions to RCM, but it is only used anecdotally" and concluded not to include this procedure into the algorithm.³

In addition to the two papers on desensitization to RCM cited by Dr Alnaes, a handful of other cases have also been published, some of them older.⁴ To my knowledge, at least as far as I can access these case reports, no proper allergy diagnosis and management have been performed on any of these patients and for most, if not all of these patients, desensitization probably was unnecessary. In the described cases, skin testing has not been performed or was even negative indicating a higher probability for a nonallergic immediate hypersensitivity reaction (IHR). Before desensitization was performed, in several of those cases the RCM was not changed, but the same not tolerated RCM was given again. Radiologists relied on premedication to prevent recurrent attacks in vain, and no skin test-negative RCM was identified and used. None of the cases published convinced me of the need for desensitization. Performing the examination with a skin test-negative RCM would be successful with a high probability.⁵ I would suspect the success of desensitization was due to changing to a different isoosmolar RCM (and probably not to adding premedication) rather than the desensitization procedure itself, as just by changing the implicated RCM to another one in one study reduced the risk of recurrent IHR by 67.1% (odds ratio: 0.329; $P = .001$), whereas steroid premedication did not show protective effects.⁶

Our group of European Network on Drug Allergy experts have highlighted that rapid desensitization is a procedure that can be used to provide a temporary tolerance to a first-line drug when no alternative is available.⁷ This implies for RCM hypersensitivity that using a skin test-negative RCM for the next examination as an alternative drug is the next step as opposed to direct immediate desensitization. One problem with desensitization is that too many doctors employ it uncritically and without prior allergy workup including skin tests, if

available, in vitro tests, and, if possible, confirmation by drug provocation test. The high rate of successful desensitizations without prior confirmation of drug hypersensitivity in the literature is in part explained by the fact that many of those patients would not have reacted anyway. I have yet to find convincing evidence to add desensitization as a standard therapeutic option to the RCM management algorithm.

Having said this, I am eagerly following up the literature on RCM desensitization with great interest to be prepared, should I encounter one of my own patients, who would react severely to an alternative skin test-negative RCM after following the algorithm. Until now, colleagues and I have not met such a patient; however, I would seriously consider desensitization as an option in such a situation. Thus, I thank Dr Alnaes for bringing up that interesting topic for discussion.

CONFLICT OF INTEREST

None declared.

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