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CONTACT DERMATITIS

Letter to the Editor

Contact allergy to gold in patients with gold-plated intracoronary stents

Dear Sir,

Svedman et al. (1), have reported their findings on the intriguing subject of potential sensitivity reactions to endovascular devices. The two aims of their study were to determine the frequency of contact sensitivity to gold in patients with gold-coated coronary stents and also to investigate the possibility of increased restenosis with gold-plated stents attributed to gold allergy.

We make the following comments. In order to investigate a possible connection between the presence of gold allergy and the need for target lesion revascularization, a preferred method is to demonstrate a statistically significant difference between the prevalence of contact sensitivity to all potentially sensitizing components of the stent in 2 cohorts of patients with and without in-stent restenosis. These 2 cohorts should be matched for all the known risk factors of in-stent restenosis, such as stent length, reference diameter; medical conditions such as diabetes and behavioural risk factors such as smoking. The authors' study does not demonstrate such data. Their study group is selected from patients with gold-plated stents, while the control group is chosen from patients referred to the Department of Dermatology because of suspected contact dermatitis. This control group may serve as a cohort to study the prevalence of gold sensitivity in different populations, but clearly would not be an appropriate control group to study possible association of metal allergy and in-stent restenosis.

Svedman et al. (1) have thoroughly measured the prevalence of contact sensitivity to gold in their patients and have concluded that implanting a gold-plated stent entails a serious risk of sensitizing the patients to gold, analogous to dental exposure (1, 2). Prior exposures to gold in all patients were evaluated through an anamnestic questionnaire and were considered in data analysis. However, to draw a scientific conclusion and to recognize gold-plated stents as potential sensitizers, optimally each patient should have been patch tested to gold prior to, and after, stent deployment.

NIR Royal Stents (Medinol®, Jerusalem, Israel), used in the study by Svedman et al., are stainless steel stents coated with gold. In prior reports of metal sensitivity in association with in-stent restenosis, sensitivity to other potential sensitizing metals such as molybdenum, manganese, chromium and nickel has been investigated (3, 4). Patients in the authors' study were patch tested with gold and the European standard series, which contains nickel and chromium, but there is no mention of patch testing with molybdenum and manganese (1). Although contact allergy to manganese and molybdenum is rare and interpretation of the patch test results with these metals is somehow controversial (4, 5), we believe that all components should be included in evaluating metal allergies in patients with coated or uncoated stainless steel stents.

We agree that further detailed studies are required to evaluate the role of metal allergy in association with in-stent restenosis.

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