



CONTACT DERMATITIS AND OCCUPATIONAL DERMATOSES

GRANULOMATOUS CONTACT DERMATITIS TO METALS

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Background: There are few reports of granulomatous reactions due to body piercing ornaments. However, gold sodium thiosulfate and palladium have been implicated mostly with a granulomatous sarcoidal pattern. Clinically it manifests as papules/nodules in locations of ornamental piercing and may either occur shortly or even months after the patient starts wearing earrings.

Observation: A 30-year-old woman presented with painful nodules of the right ear with 3 years of evolution. There was no relevant allergic or atopic history. Clinical examination showed three erythematous and skin-coloured soft nodules with a diameter of about 1cm on the right earlobe and helix. Lesions were located in areas previously pierced some years ago. The biopsy of a nodule revealed a granulomatous skin reaction with “tuberculoid-like” and sarcoidal granulomas. Periodic-Schiff reagent and Ziehl-Neelsen stainings were negative. A chest radiograph and laboratory tests, including angiotensin-converting enzyme and calcium measurements, ruled out systemic sarcoidosis. Patch testing with the standard Portuguese baseline series and metal series showed a positive reaction to nickel (++), cadmium (++) and palladium (+++) (on D3 and D4). Skin biopsies of the positive patch test sites showed a similar granulomatous pattern. Based on results, we established the diagnosis of granulomatous contact dermatitis due to metals. The patient was advised to apply betamethasone dipropionate 0,05% cream id on earlobe lesions and avoid further ear piercings.

Key message: Sensitization to metals generally manifests as eczema, but on rare occasions it can trigger the formation of a granulomatous reaction. When confronted with this clinical and histopathologic pattern in piercing sites, contact allergy to metals should be considered. Metallic ornament use is increasing among young population, being extremely important to recognize this source of granulomatous reaction. Moreover, a detailed history and complementary patch testing with metal series is required to reveal the true nature of these lesions.

