

ENT OTOSCOPIC CLINIC

Allergic contact dermatitis of the auricle

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A 37-year-old man with chronic otitis media underwent a left tympanoplasty via a postauricular approach. During surgery, the external auditory canal was packed with gelatin foam soaked in neomycin/colistin/hydrocortisone otic suspension. Three days after surgery, the patient began experiencing auricular erythema. At 1 week, he had developed a papular erythematous dermatitis with areas of scaling in addition to a clear, yellowish otorrhea (figure). He also complained of pruritus in the ear and on the skin around the ear.

The patient was diagnosed with allergic contact dermatitis of the auricle. The dermatitis represented a delayed Gell and Coombs type IV hypersensitivity reaction. The most common cause of this dermatitis is the neomycin component of the otic drops. Previous use of ear drops that contain this agent may sensitize a patient to the antigen. In one study, 13% of patients who were treated for chronic otitis media were allergic to neomycin on skin patch testing.¹

Avoidance of the offending allergens is the most preferable strategy for managing allergic contact dermatitis. For patients who have already been exposed to an offending allergen, medical treatment is indicated. Oral antihistamines and topical corticosteroids often help in the resolution of this condition. In severe cases, oral corticosteroids may be needed and, in cases of bacterial superinfection, oral antibiotic therapy may also be necessary.

Patients who are allergic to topical neomycin may also be allergic to other topical and systemic aminoglycosides, so they should avoid using any of these agents. If there is any doubt as to whether a patient has a true allergy to neomycin, skin patch testing may be performed. Another possible—although uncommon—cause of allergic contact dermatitis is allergy to corticosteroids; patch testing can also be performed if a steroid allergy is suspected.



Figure. One week postoperatively, the patient exhibits papular erythema and clear, yellowish otorrhea.

Reference

1. Yung MW, Rajendra T. Delayed hypersensitivity reaction to topical aminoglycosides in patients undergoing middle ear surgery. *Clin Otolaryngol Allied Sci* 2002;27(5):365-8.