

## Delayed hypersensitivity to Mitomycin C

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Mitomycin C is an antibiotic, derived from *Streptomyces caespitosus*. It selectively inhibits DNA synthesis and is used intravesically as a treatment for superficial bladder cancers.

### Case Report

A 60-year-old male with a low grade superficial bladder tumor who, following transurethral resection, received intravesicular Mitomycin C therapy. Seven hours after Mitomycin C was administered for the seventh time, he experienced palmo-plantar, penile, and scrotal pruritus, and subsequently, erythema and desquamative lesions on the palms of his hands (Fig. 1) and the penile area. The symptomatology recurred after the eighth instillation of intravesical Mitomycin C. Epicutaneous tests with Mitomycin C in paraffin oil and petrolatum, recorded after D2 and D4, were both positive at concentrations of 1% (+++), 0.3% (++), and 0.1% (++) (Fig. 1). Five controls tested negative.

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\* All the authors have participated in the scientific research and in the drafting of the manuscript.



Fig. 1. Erythema and desquamative lesions and Epicutaneous tests.

### Discussion

Cystitis and cutaneous reactions are the most frequently reported side-effects (1).

Contact allergy to Mitomycin C, from intravesical as well as from local application, has been described by several authors (2–6).

Contact allergy to Mitomycin C can develop through direct contact with the skin with the substance, due to skin contamination with urine containing Mitomycin C (5), and through systemic absorption of Mitomycin C from the bladder mucosa (2).

We report a case of systemic allergic contact dermatitis from Mitomycin C in which the positive epicutaneous tests at different concentrations (1%, 0.3%, and 0.1%) revealed a Type IV hypersensitivity reaction.

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