CONTACT DERMATITIS AND OCCUPATIONAL DERMATOSES

SYSTEMIC ALLERGIC CONTACT DERMATITIS TO MITOMYCIN C FOLLOWING INTRAVESICAL INSTILLATION: A RETROSPECTIVE STUDY

M. M. Valejo Coelho (1) - K. Kieselova (2) - L. Lobo (1)

Department Of Dermatology And Venereology, Centro Hospitalar Universitário De Lisboa Central, Lisbon, Portugal (1) - Department Of Dermatology, Centro Hospitalar De Leiria, Leiria, Portugal (2)

Introduction: Mitomycin C, an antibiotic and alkylating agent derived from Streptomyces caespiitosus, is used intravesically for bladder cancer treatment, with cutaneous adverse reactions occurring in approximately 9% of the patients. Some case reports and short series of systemic allergic contact dermatitis (ACD) to this chemotherapy agent have been published.

Objective: To analyze the cases of systemic ACD to Mitomycin C diagnosed in our Dermatology Department.

Materials and Methods: Retrospective study of the 38 cases referred to our Dermatology Department for investigation of potential ACD to Mitomycin C, from May 2001 to August 2018. Patch testing was performed using the Portuguese baseline series of contact allergens and Mitomycin C (aqueous solution) at three different concentrations (0.1%, 0.05%, 0.025%), applied in Finn or IQ Ultra chambers in the upper dorsum, with readings at 48 and 96 hours.

Results: ACD was confirmed by positive patch tests for Mitomycin C at all three dilutions in 22 (58%) patients (18 men, 4 women), aged 40–84 years (median 72 years), all referred from the Urology Department due to the onset of cutaneous manifestations, like eczematiform lesions and pruritus, under intravesical Mitomycin C treatment. Irritant contact dermatitis to Mitomycin C was found in 4 cases, and patch tests were negative in the remaining 12.

Conclusions: We identified 22 cases of systemic ACD to Mitomycin C, of variable clinical presentation and severity, in patients who had received intravesical instillations of this drug. To the best of our knowledge, this is the largest series of cases of ACD to Mitomycin C, which is thought to result from systemic exposure to this allergen by transmucosal absorption through the bladder epithelium. Our work highlights the importance of performing adequate patch tests in suspected cases, since confirmation of sensitization to Mitomycin C
helps to inform treatment options for urothelial neoplasms.