

Fixed drug eruption due to sodium fluorescein

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E. Di Leo, E. Nettis, A. M. Aloia, A. Ferrannini, and A. Vaccat

Unit of Allergy and Clinical Immunology, Department of Internal Medicine, Immunology and Infectious Diseases, University of Bari Medical School, Bari 70124, Italy

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We describe a case of fixed drug eruption due to sodium fluorescein diagnosed by a positive patch test.

Sodium fluorescein is a dye used in angiography for investigation of many ocular diseases. The use of it is considered generally safe, but adverse reactions to this contrast media are described in the literature (1), including immunoglobulin E-mediated events following intravenous administration (2).

Case Report

A 65-year-old female patient presented to us with an itchy, 4 cm violaceous, discoid, bullous plaque on her right forearm. She was hypertensive taking propranolol and had a hypertensive retinopathy for which she had routine angiography with Fluoralfa® 20% (Alfa Intes, Napoli, Italy) every 6 months. She had a history of a similar lesion 6 months earlier at the same site that had healed after topical corticosteroids to leave residual hyperpigmentation. She recalled having taken ibuprofen orally as an anti-inflammatory drug in previous months, but she was unable to relate this to the onset of cutaneous lesions. She had no other relevant history.

A fixed drug eruption diagnosed clinically but the responsible agent was unclear. However, we did consider ibuprofen as the possible cause and recommended that the patient should avoid it. The lesion on her arm resolved within 7 days with topical steroids. After 3 weeks, we carried out patch testing on site of the lesion using ibuprofen at 5% in pet. (3). As the patch test was negative, we then gave her an oral challenge with ibuprofen, but this too was negative. Finally, our patient remembered that

in both cases, she had undergone fluoroangiography with sodium fluorescein 2 days before the onset of each skin reaction. We performed a patch test using Large Finn Chambers on Scanpor tape with 2-day occlusion on the involved site of the previous lesion using sodium fluorescein (Fluoralfa® 20%; Alfa Intes) undiluted and at 1:10 dilution in preservative-free sterile water. Readings were made on D2, D3, and D4; reactions were first seen on D3 and consisted of violaceous bullous lesions (+++) according to International Contact Dermatitis Research Group criteria. The same tests performed in 10 controls were negative.

Tel: 0039 080 5592821
Fax: 0039 080 5593576
e-mail: e.nettis@allergy.uniba.it

Discussion

Generally, fixed drug eruptions occur after oral intake of drugs. To our knowledge, our report represents the first case of a fixed drug eruption caused by injected sodium fluorescein. The pathomechanism of fixed drug eruptions remains unknown, but the persistence of memory T cells in the involved skin area is probably a factor in the recurrence of skin or mucosal lesions at the same sites (4). At present, patch testing remains a key in determining the responsible drug (3).

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Address:

Eustachio Nettis, MD
Cattedra di Allergologia ed
Immunologia Clinica
Università degli Studi di Bari
Policlinico, Piazza Giulio Cesare, 11
70124 Bari
Italy