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Successful fluorescein desensitization

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Adverse reactions to fluorescein angiography ranging from local symptoms to anaphylactic shock have been reported in literature (1, 2). Most reactions are generated by

We report the case of a 66-year-old man suffering from fluorescein allergy who underwent desensitization successfully.

Table 1. Desensitization protocol in fluorescein allergy

<i>First day</i>	
Dilution 1/100	
0.1 ml i.v.	
0.2 ml i.v.	
0.3 ml i.v.	
0.4 ml i.v.	
Total dose = 0.01 ml of 20% sodium fluorescein	
<i>Second day</i>	
Dilution 1/10	
0.1 ml i.v.	
0.2 ml i.v.	
0.3 ml i.v.	
0.4 ml i.v.	
Pure solution	
0.1 ml i.v.	
0.2 ml i.v.	
0.3 ml i.v.	
0.4 ml i.v.	
Total dose = 1.1 ml of 20% sodium fluorescein	

nonimmune mechanisms. In some cases an immunological IgE-mediated mechanism is also reported (2, 3). To our knowledge no data on fluorescein desensitization are available in literature.

We report the case of a 66-year-old male who experienced oedema of the face and hands after intravenous administration of 2 ml of 20% sodium fluorescein.

The patient was referred to our Allergology Department because he needed to undergo a new fluorescein angiography.

An allergological evaluation (including skin prick and patch tests) with 20% sodium fluorescein was performed. The skin prick test was positive (with a 4-mm wheal) while the patch test was negative. Saline and histamine solutions were used, respectively, as negative and positive controls. Ten healthy control subjects were skin-prick tested with fluorescein and all results were negative. These findings are consistent with the occurrence of an IgE-mediated allergy to fluorescein.

We decided to attempt a desensitization in accordance with the reported protocol (Table 1). After obtaining informed consent, the desensitization

was performed by the administration of increasing doses of fluorescein every 30 min by the intravenous route.

The treatment began with an initial dose of solution containing 0.1 ml of 20% fluorescein diluted 1 : 100. On the first day, the patient received a cumulative dose of 0.01 ml of 20% fluorescein. On the second day, the desensitizing protocol was successfully completed, reaching the cumulative dose of 1.1 ml of 20% sodium fluorescein. After 3 days, the patient could undergo fluorescein angiography with no side-effects at all.

Although this study has been carried out on only one patient, it provides evidence that in case of an IgE-mediated allergy to fluorescein, a specific hyposensitizing treatment is possible and it should be taken in consideration for those patients who must specifically use this drug.

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