Reviewer’s report

Title: Severe generalised hypersensitivity reaction to topical neomycin after cataract surgery: a case report

Version: 2 Date: 9 November 2007

Reviewer: Sumit P Shah

I am familiar with the literature and believe that this case meets one of the 7 criteria for evaluation in the journal: Unreported or unusual side effects or adverse interactions involving medications

Has the case been reported coherently?: Yes

Is the case report authentic?: Yes

Is this case worth reporting?: Yes

Is the case report persuasive?: No

Does the case report have explanatory value?: Yes

Does the case report have diagnostic value?: Yes

Will the case report make a difference to clinical practice?: Yes

Comments to authors:

General

1. The first sentence of the paper which remarks about the incidence of hypersensitivity reactions to topical therapy being 10% of all adverse reactions is a bit confusing. First, I went to the abstract for the paper they cited, and I couldn't find the 10% number they quoted. In addition, it sounds to me that they mean "localized" or "adverse external ocular effects" and not generalized hypersensitivty. This should be stated explicitly.

2. Systemic side effects of topical medications are well known, albiet rare compared to local hypersensitivity reactions. For example the effects of beta blockers such as timolol on asthma/copd exacerbation and the possible role of topical carbonic anhydrase inhibitors in patient's with chronic renal failure. This report does not describe a new entity. Rather, it re-iterates a well known problem in a different setting

3. The last sentence of the report states "This case report emphasizes the importance of a thorough drug and allergy history when patients are seen at pre-assessment or clerked in for surgery. Even when drugs are given topically
and locally, the possibility of a severe systemic reaction should be borne in mind." This sentence implies that the root of the problem in this patient lies with the history taking and the pre-op assessment. I beg to differ. A pre-op allergy assessment is a routine part of any surgery at multiple steps in the ladder of ultimately having surgery. Thorough histories are obtained by the surgeons, the anesthesia staff, the nursing staff etc. But in my novice opinion, the reason why this sort of problem occurred lies in the fact that such generalized hypersensitivity reactions to TOPICAL meds are so rare to begin with, that even if the patient had reported it to me, I would not be inclined to change my practice of applying maxitrol. The probability of the hypersensitivity occurring is so rare that it would not outweigh the benefits. Furthermore, it is a very treatable condition, short of anaphylactic shock. I think a better point to make is that even though we may give topical medications despite a remotely reported allergy, as physicians we should educate our patients about the signs and symptoms of such an allergy so the patient need not suffer for two weeks.

4. Although the report focuses on the systemic allergy, it fails to describe a thorough ophthalmic exam which may be relevant. For example, on POD #1 the authors state there was "more injection than expected" Can they elaborate on this subjective description further? In addition, they fail to mention the presence or absence of papillae or follicles on the palpebral conjunctiva. In order to make the conclusion that the systemic allergy was a result of the local therapy, the first step would be to establish that a local allergy was present based on the tell-tale signs of a local ophthalmic allergy.

5. What accounts for the patient's post op 20/30 vision? CME?

6. The authors should discuss/investigate the incidence of systemic allergy to Neomycin and determine what has been reported regarding allergies to Maxitrol and its components. A better approach to the paper may be to highlight the pros and cons to Maxitrol since its so widely used in ophthalmology and what to look out for prior to ophthalmic use post-operatively.

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Revisions necessary for publication

Please address points 1, 3, 4, and 6 listed above in the General comments.

Positives:
1. Well organized, short and straightforward.
2. Describes a relatively rare entity, although it has been described before.
3. The photographs illustrate nicely the basis for the case report.

What next?: Accept after minor revisions

Quality of written English: Acceptable