Reviewer's report

Title: Glucocorticoid hypersensitivity as a rare but potentially fatal side effect of pediatric asthma treatment: a case report

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Reviewer: Max Kuhn

I am familiar with the literature and believe that this case meets one of the 7 criteria for evaluation in the journal: Unexpected or unusual presentations of a disease

Has the case been reported coherently?: Yes

Is the case report authentic?: Yes

Is this case worth reporting?: Yes

Is the case report persuasive?: Yes

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:

Glucocorticoid hypersensitivity as a rare but potentially fatal side effect of pediatric asthma treatment: a case report

S. Lehmann, H. Ott

Immediate hypersensitivity reactions to parenteral glucocorticoids are rare, but often serious and life-threatening. Lehmann et al report a well-documented case of an immediate hypersensitivity reaction in a 2 year-old boy after intravenous application of prednisolone-21-hydrogensuccinate. The pathomechanism of the reaction remains unclear. An oral provocation test with betamethasone and a titrated intravenous dexamethasone challenge were negative.

This interesting case report should be accepted for publication, however, one important point has not been addressed and needs further discussion: What additives / excipients are included in the glucocorticoid formulation administered to the patient? Are there differences regarding additives / excipients between the different formulations which were well tolerated? Is there a possibility that the additives / excipients could have played a role in this hypersensitivity reaction?
In 2000, we published 14 cases of immediate hypersensitivity reactions following the administration of glucocorticosteroids spontaneously reported to the Swiss Drug Monitoring Center (Swiss Medical Weekly 2000;130: 977-83). One out of the 14 patients was a 11 year-old child. In two cases the reaction could be traced back to the additive carboxymethylcellulose present in the administered glucocorticoid formulation. In two cases, skin tests showed positive results for the glucocorticoid involved, and in ten cases the exact pathomechanism remained unclear.

What next?: Accept

Quality of written English: Acceptable