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Poster

## [P25-2] P25-2: Anti-infective drugs (2): Beta-lactams

Chair: Veronique Stove, Belgium

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### [P25-2-9] Tonic clonic generalized seizure in 6 years old boy in association with procaine penicillin injection: a variant of Hoigne's syndrome?

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#### Background

Hoigne's syndrome is pseudo anaphylactic reaction following procaine penicillin injection. The disorder is characterized predominantly by neuropsychiatric alterations including severe psychomotor agitation with confusion including panic-like anxiety although variants of manifestation may exist. The aim of this contribution is to describe a Caucasian male child with tonic-clonic generalized seizure after procaine-penicillin

#### Methods

The past medical history, presenting complaints, differential diagnosis consideration and final resolutions including treatment outcomes of a school age boy, who had an adverse event after an intramuscular drug injection is worked up as case study.

#### Results

A 6 year boy has been admitted to paediatric emergency bed for generalized tonic-clonic seizure few minutes following procaine-penicillin intramuscular injection. The child from the 2<sup>nd</sup> physiological gravidity was born at 38 gestation weeks by Caesarean section indicated due to maternal health with weight at birth 3450 g, length 50 cm. Then, breast-fed till 6 month, vaccinated according to national paediatric vaccination scheme, normal development except frequent middle ear infection and later report of Ig-A deficiency. The boy also suffered frequent tonsillopharyngitis (up to 4 times yearly). During two episodes of streptococcal angina in the past; he has been treated by procaine-penicillin intramuscular injection without adverse events. At age of 4 years the boy has undergone adenotomomy. Just two weeks before the event he again suffered from streptococcal angina, which has been treated by oral penicillin, just to complain of the same symptom ten days later. Procaine-penicillin intramuscular injection is prescribed again for third time in life. The dose with the adverse event is the third one since started for streptococcal angina exacerbation. Reportedly injection was not smoothly this time, because of insufficient co-operation of the boy. However, nearly 5 minutes after the injection, the boy demonstrated shortly unconsciousness, hyper salivation, central cyanosis, symmetrical cramping of both upper and lower extremities, despite past negative history of epilepsy. After diazepam 5 mg per rectum, and thereafter 10 mg intravenously, the condition gradually restored except intermittent tensions of extremities. Further follow-up investigation revealed restoration to normal.

#### Conclusions

After ruling out allergy and any other underlying reason, the adverse reaction was concluded to be the variant of Hoigne's syndrome. It should be noticed that intramuscular injection technique of procaine-

penicillin needs extraordinary cautions in all patients, particularly in children. Nevertheless, skilful differential diagnosis workup is of vital importance to guide therapy.