

Case Report

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Propofol Induced Priapism: Case Report



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Introduction

Propofol is commonly used as an intravenous anesthetic drug because of its favorable properties like quick action's onset, early recovery and absence of significant nausea. The most commonly reported adverse events with this drug are the development of respiratory failure, hypotension and pain during infusion [1]. Propofol has been reported to cause sexual hallucinations during and after sedation, but priapism was rarely documented in some individuals previously [2]. Propofol-induced priapism in a healthy male is reported herein, the first case in Tunisia.

Case Report



Patient MF 9 years old without previous history was admitted for urological surgery cure of bilateral testicular ectopia. Examination revealed no history of priapism, hematological or genito urinary disease and genital trauma. Patient didn't take any medication. Systemic examination was without any particularity. Complete blood count, coagulation parameters and blood chemistry were within normal limits. In the operating hall after conditioning, monitoring and oxygenation he received propofol (4mg/kg), sufentanyl, (0.3µg/kg) and a laryngeal mask was introduced. Five minutes after anesthesia's induction the patient developed rapid penile tumescence and we thought that this incident was related to the lack of complete anesthesia. The reinjection of 50mg of propofol enhanced priapism (Figure 1) while hemodynamic parameters were and remained correct. Propofol was stopped and sevoflurane was introduced (1 MAC) but there is no change and there is a persistence of priapism for a period of 15min. Therefore a first 3mg injection of

epinephrine intra cavernous without results, a second injection given 10 minutes after allowing immediate detumescence and no complications were noted after. Anesthesia was continued with sevoflurane, and the surgery is successfully completed, the patient is kept under surveillance 24 hours post procedure we did not noticed a local or general complications.

Conclusion

Priapism experienced by this patient is considered to be drug-induced because of the temporal relationship. Our patient experienced a permanent erection after five min of propofol. The induced priapism may have a causal link very strong with a score of 6 in the scale of Naranjo [3]. Cumulative dose in our patient was 150 mg and the adverse reaction does not seem to be dose dependent since the amount remains variable in the other three cases described [4]. Predisposing factors could probably afford a certain explanation in addition to those known like sickle cell disease, leukemia, genital trauma [5].

The mechanism does not seem to go in the sense of low flow since in time of the incident the hemodynamic state were in normal limits, but we believe that contributing factors such as the imbalance between both sympathetic and parasympathic system [6], a central action on the GABA system [1] and finally the lipid component appears to play a role in patient already fitted [7]. Further resarch is still necessary to determine the exact mechanism, and particular care must be given to patients predisposed to priapism or to those who have had an episode. This world forth case reinforces other observation to reflect this undesirable effect of propofol in our practice. This case highlights the report of a possible association between propofol and the development of priapism as a side effect of propofol, an anesthetic commonly used in Tunisia, which requires immediate attention for anesthetists doctors avoid complications.

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