43631 - SINGLE DOSE DEXAMETHASONE INDUCED POSTOPERATIVE PSYCHOSIS

CASE REPORT or SERIES

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PURPOSE: Dexamethasone is frequently used for postoperative nausea and vomiting (PONV) prophylaxis. We report a patient, who developed postoperative Acute Steroid induced Psychosis, following a single dose of Dexamethasone.

CLINICAL FEATURES: Patient's consent was obtained for this report. An otherwise healthy, 33 year-old, female patient, presented for a biopsy of a painful humeral mass. Preoperatively, she was receiving morphine PCA, hydromorphone and gabapentin. General anesthesia was induced with propofol, rocuronium, propranolol and cephazoline and the patient was intubated. She received iv dexamethasone 8 mg. Anesthesia was maintained with air-O₂-Desflurane. Surgery lasted for 2 hours because of the waiting time for the rapid biopsy. After extubation she was transferred to the PACU awake and calm. On arriving at PACU, she became agitated, restless and aggressive. She received iv midazolam, propofol and morphine for sedation, but remained agitated and confused. In the next 3 hours, she received iv morphine 13 mg, propofol 90 mg, fentanyl 100 mcg, midazolam 6 mg, droperidol 2 mg and chlorpromazine 50 mg im and was relatively calm. Then, she became restless and delirious. She received iv chlorpromazine 25 mg to calm her for 2.5 hrs. Psychiatry consultation diagnosed an Acute Psychotic episode possibly induced by steroids. She received iv hydromorphone 2 mg, morphine 2 mg, midazolam 2 mg and im haloperidol 5 mg. An iv propofol infusion provided sedation for 3.5 hrs. Following a stop test of 1.5 hrs, she became uncontrollable receiving iv midazolam 2 mg, lorazepam 2 mg, sublingual olanzapine 5 mg. Propofol infusion continued until 01:20 am. As the patient remained calmer, she was transferred to the ward. Next day, she was again delirious and agitated, receiving im haloperidol 10 mg, twice. She was admitted to ICU and received propofol infusion, with midazolam, fentanyl and haloperidol. The second postoperative day, she improved from psychiatric point of view and was transferred to the ward. She continued psychologically stable, without agitation, requiring no sedatives or antipsychotics. Within the next week, she had surgery for sequestrectomy and debridement, both performed uneventfully under interscalene block with sedation. She was discharged with no sequelae, on the postoperative day 13 after her first surgery.

CONCLUSIONS: While the incidence of postoperative delirium is 36.8% (1), acute steroid-related psychiatric disorder frequency is 5% (2). Intravenous dexamethasone is the first line agent for PONV prophylaxis, because of its low cost and safety, reducing PONV by 26% (3). Dexamethasone-related Acute Psychosis has not been reported with a single intraoperative dose. Because this drug is widely used today in anesthesia it seems important to raise awareness about potential complications.

REFERENCES:

- 1) Arch Intern Med 1995;155(5):461-465
- 2) Otolaryngol Head Neck Surg 2003;129:591-592
- 3) N Engl J Med 2004; 350(24): 2441-2451