

Postoperative Psychosis Secondary to Propofol

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ABSTARCT

Postoperative delirium is a well-documented occurrence in geriatric patients particularly in the intensive care unit following high operative stress surgeries such as orthopedic surgeries or cardio-thoracic surgeries. Rarely if at all, is postoperative psychosis seen with short, elective, or low operative stress surgeries. In this case, we present a case of postoperative psychosis secondary to propofol in a geriatric patient with psychiatric illnesses.

KEYWORDS: Elderly; Psychosis; Schizoaffective Disorder; Mood Disorder; Anxiety; Obsessive Compulsive disorder; Weight loss; Depressed; Psychomotor Retardation.

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INTRODUCTION

A sixty-nine-year-old Caucasian male, with a past psychiatric history of Major depressive disorder, Anxiety disorder, Obsessive compulsive disorder, Autism spectrum disorder, generalized anxiety disorder, Cannabis use disorder in sustained remission, and a past medical history of hypothyroidism and Edentulism, presented to the Comprehensive Psychiatric Emergency Program for evaluation. During the intake interview patient was calm, superficially cooperative with depressed mood, poor eye contact and very irritable. He mentioned over the past few months though he had been compliant with medication, he has felt worse with his depression and rates it an 8/10. He endorsed poor sleep, low energy, anhedonia, hopelessness, helplessness, and had not showered in two weeks

because he was not motivated to do so. He however, denied suicidal and homicidal ideation. His speech was hesitant with decreased rate and volume but regular rhythm. His affect was flat and constricted, with linear and goal directed thought process, preoccupation with going home and some paranoia. He denied any auditory or visual hallucination and showed poor insight and judgment.

Collateral was obtained from sister who accompanied patient for evaluation. She corroborated the above information, also confirming that patient has been unable to care for self even though he lived alone and has decompensated over the past several weeks.

ASSESSMENT

The patient weighed 95.5 pounds, with a body mass index of 15.0, and blood pressure of 132/73 mmHg, pulse 100/min, and temperature of 98.4 Fahrenheit. Physical exam revealed edentulism, and patient equally had a very anxious and depressed affect. Physical examination of every other system, however, was normal. EKG revealed sinus tachycardia, possible left atrial enlargement, his fasting glucose was elevated 165 mg/dL (reference range: 99 or lower is normal, 100 -125 prediabetes, 126 and higher diabetes), his Hemoglobin A1c was 6.0, his triglycerides 167mg/dL (reference range is less than 150), cholesterol 268mg/dL (reference range is less than 200mg/dL), LDL cholesterol 196.6mg/dL (reference range is less than 100mg/dl). He also had TSH levels of 0.016 (reference range is 0.5-5.0). His electrolytes however, including his whole blood count, urinalysis, toxicology screen, RPR were within normal limit. His SARS-COV-2 RNA (RT-PCR) was also negative. A head CT without contrast was also done and revealed no abnormal findings, as well as an abdominal x-ray due to reported constipation which was equally unremarkable.

The plan at this point was to admit the patient into the inpatient unit and begin Abilify 2mg PO daily and titrate as needed, levothyroxine 75mcg PO for hypothyroidism, Lexapro 10mg PO daily, Ativan 1mg PO bedtime for sleep, Trazodone 25mg PO prn for sleep. Patient was also going to be placed on ensure diet, dental soft diet, and also get a nutrition consult.

Two weeks into the patient's admission in the inpatient unit, a gastroenterology consult was placed because the patient had a poor oral intake, hematochezia, and a 10 lbs. weight loss. The patient stated he did not have any appetite and had lost a total 35 lbs. in the last several months. Considering the patient's age and the current symptoms, to rule out any likelihood of a malignancy an endoscopy and colonoscopy was suggested in which the patient declined. He declined the procedure again, on another gastroenterology consult. Eventually patient came around and agreed to the endoscopy, have been told all the risks and benefits, patient also verbalized his understanding of the procedure. He was given 100 mg IV slowly divided doses in 2 before the procedure. Procedure was continued without any complications. The results of the colonoscopy revealed irregular squamocolumnar junction, gastritis both of which prompted biopsies to be taken. They also found medium sized internal and external

hemorrhoids, a 12 mm polyp in the sigmoid colon which was removed via hot snare polypectomy and retrieved. Endoscopy procedure didn't find any abnormalities.

24 hours after the procedure, the patient's mental status decompensated drastically. Patient became paranoid and continued to insist that someone was coming out of the wall (which he called a closet) to kill him. Patient equally punched the other member in the room without any provocation. He equally would not shower in the following days and would walk out of the room naked and had to be persuaded to put some clothes on, at other times he would talk about having a painting job he needs to get to. All of these behaviors were not present before the colonoscopy, in fact the patient was only known to come out of the room during visiting hours and whenever it was time for his medication, group meetings and mealtimes. The staff described him as acting so erratic post colonoscopy. A neurology consult was placed to assess any possible brain injury that would explain the drastic change in behavior, no hemorrhage was appreciated on MRI. A urinalysis was also done to rule out any urinary tract infection, and there were equally no organisms present in the culture. The patient mini-mental status score dropped from his baseline of 29/30 at admission to sometimes a 16/30 during this period post colonoscopy. Over the next 72-96 hours however, we started seeing the patient returning back to baseline without any interventions. We saw a subsequent weight gain from 104 pounds to 110 pounds, a marked improvement in his mini-mental exam score to 27/30 almost at baseline. In the patient's own words "I feel better". Patient returned to adapting to the rules of the inpatient unit, no longer showed any behavioral disturbances. His thought process became linear, he became less paranoid and his mood improved. He continued to use his medications without exceptions and denied any suicidal and homicidal ideation, as well any audio-visual hallucinations. Patient continued to remain in the unit as he needed more stabilization and also as his living situation was being processed.

DISCUSSION

Psychosis is rarely seen status post elective procedures such as endoscopy and colonoscopy. As a matter of fact, our search of major research databases turned up nothing as regards "postoperative psychosis secondary to propofol in a geriatric patient with MDD".^[1-5] making this case a very rare occurrence. The product inserts for propofol did mention a less than 1% chance of hallucination, combativeness, confusion, in addition to paranoia which we did see in this patient put together are all symptoms of psychosis. However, the causal relationship between propofol and psychotic symptoms remains unknown.

CONCLUSION

While postoperative delirium (which is a waxing and waning of mentation) is a well-documented occurrence especially in geriatric patients. Psychosis secondary to propofol on the other hand is not a commonly reported occurrence. It therefore becomes very important to be vigilant when patients

especially geriatric patients who have a slower metabolism of drugs undergo procedures that might involve the use of anesthesia as this could lead to a decompensation in their mentation.

REFERENCES

1. Jean M, Hugh C, Jacques B. Postoperative Delirium in Elderly Surgical Patients, Anesthesio. 2010;112:189-195.
2. Marcantonio ER. Postoperative Delirium, A 76-Year-Old Woman With Delirium Following Surgery. JAMA. 2012;308(1):73-81.
3. Milstein A, Pollack A, Kleinman G, Barak Y. Confusion/Delirium Following Cataract Surgery: an Incidence Study of 1-year Duration. Interna psycho.2002;14(3):301-306.
4. Sharon K, Thomas R. Postoperative Delirium Older Adults. Ameri Geria Soci Expe pan. 2015;220(2):136-148.
5. Thomas R. Postoperative Delirium in the Elderly : Dianosis and Management. Clini interv in agi.2008;3(2):351-355.