When Best-Laid Plans Go Awry: Intraoperative Management of New-Onset Panic Attack During Scheduled Cesarean Delivery

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Introduction

- DSM-V defines **panic disorder** as an anxiety disorder based primarily on the occurrence of recurrent and often unexpected panic attacks. At least one panic attack must be followed by one month or more of persistent concern about additional attacks or their consequences or a significant maladaptive change in behavior related to the attacks, or both. The panic attacks cannot be due to the direct physiological effects of a substance or a general medical condition and cannot be better accounted for by another mental health disorder[1].
- As the peripartum period tends to be an especially stressful time for many parturients, it places some women at an increased risk of developing new-onset or having an exacerbation of preexisting anxiety symptoms and disorders[2].
- Panic disorder is fairly uncommon among pregnant women and is estimated to be in the 0.2-5.2% range[3], with an incidence of pregnancy-onset panic disorder found to be at 1.3%[4] . If left untreated, panic disorder portends significant morbidity in both a mother and a fetus and may result in compromise of safety during delivery, development of postpartum depression[5], lower gestational age at delivery, higher incidence of preterm birth and low birth weight, and higher rate of admission to a neonatal intensive care unit following delivery[6].

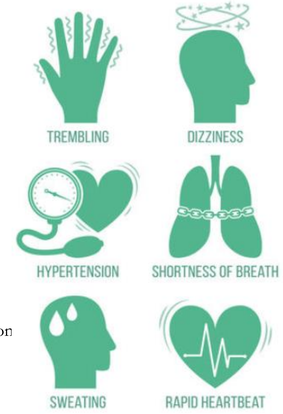
Case Presentation

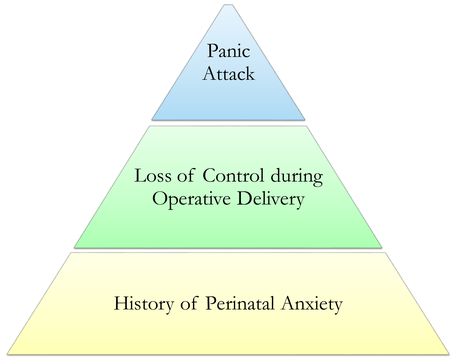
A 40 y.o. G5P2022 female at 37w3d gestation with a past medical history of GERD presented to L&D Triage for a scheduled repeat Cesarean section and bilateral salpingectomy. Her pregnancy had been complicated by advanced maternal age and history of two prior Cesarean deliveries. Both of her prior Cesarean deliveries were notable for challenging placement of the spinal anesthetic. Her second Cesarean delivery was complicated by deep myomectomy of a large uterine fibroid with significant blood loss requiring post-operative blood transfusion. Anesthetic plan included delivery under spinal anesthesia, which would be placed by an experienced anesthesiologist as per patient's request. Patient's vital signs were stable prior to the operation. Laboratory data were within expected parameters. NPO status, allergies and medications were reviewed. No contraindications to neuraxial anesthesia were identified.

Following uneventful placement of spinal anesthetic, Cesarean section proceeded as planned, and a healthy infant was delivered without any complications. Shortly after the delivery and initiation of skin-to-skin, the patient became tearful, restless, agitated and started complaining of severe dyspnea, chest tightness, and paresthesia in both hands. Her vital signs were notable for tachypnea and sinus tachycardia to 164 bpm but were otherwise stable. After careful review of the patient's psychiatric history, no prior history of generalized anxiety disorder, PTSD, specific phobias, panic disorder, or other mental illnesses were identified. Given concern for a new-onset panic attack, the patient was reassured of her safety as well as safety of the infant and promptly given 2 mg midazolam. Her symptoms were relieved almost instantaneously, and the operation was finished in a normal fashion. At the conclusion of the case, she was transferred to the recovery area, as planned. The remainder of her hospital stay was uneventful, and she was discharged home on POD #3.

Screening and Diagnosis

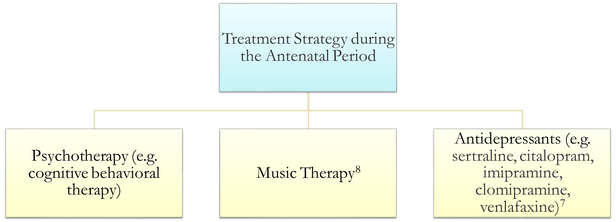
- According to DSM-V, a **panic attack** is characterized by an abrupt surge of intense fear or intense discomfort that reaches a peak within minutes and during which time four or more of the following symptoms occur[1]:
  - Palpitations, pounding heart, or accelerated heart rate
  - Sweating
  - Trembling or shaking
  - Sensations of shortness of breath or smothering
  - Feeling of choking
  - Chest pain or discomfort
  - Nausea or abdominal distress
  - Feeling dizzy, unsteady, lightheaded, or faint
  - Fear of losing control or "going crazy"
  - Fear of dying
  - Paresthesias (numbness or tingling sensation)
  - Chills or heat sensations
  - Derealization (feelings of unreality) or depersonalization (being detached from oneself)



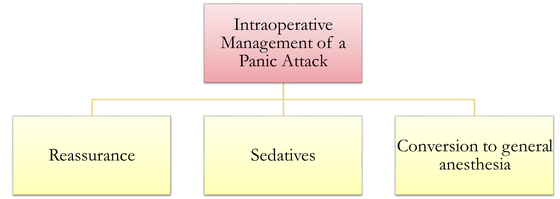


- Preoperative screening for history of perinatal anxiety disorders is important to identify patients at risk for development of panic disorder
- New-onset panic attack in the peripartum period is rather a rare event that needs to be promptly differentiated from some of the more serious conditions that may initially have some of the same clinical features (i.e. myocardial infarction, amniotic fluid embolism, pulmonary embolism, etc.)
- No role for imaging or laboratory data as this is a clinical diagnosis

Management Strategy



- The choice of therapy would depend on the severity of symptoms and impact of functioning, the risks associated with untreated illness, and the risks of using of medications in pregnancy



Discussion

- Prompt recognition and treatment of peripartum anxiety, phobia(s), and panic attacks is vital to ensuring patient safety and improving maternal and fetal outcomes as well as overall satisfaction with birthing experience
- Although incidence of new-onset panic attacks during Cesarean delivery is low, anesthesia providers need to be prepared to manage this condition
- Strategy for intraoperative management of panic attacks should be tailored to individual clinical situation

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