Anesthesia for Cesarean Section in Patients with Wolff-Parkinson White Syndrome

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Introduction: Reports have indicated that pregnancy predisposes asymptomatic patients with Wolff-Parkinson-White (WPW) syndrome to supraventricular tachycardia (SVT). Reasons for this observation are unclear. Some explanations such as increased awareness, hemodynamic, hormonal, autonomic and emotional changes related to pregnancy have been implicated as some of the reasons.

Case Report: A 32 year-old female, with history of WPW syndrome, received caesarean section (C/S) for cephalopelvic disproportion. EPS was performed without ablation before. She felt chest pain and dizziness occasionally, but no syncope. Preoperative vital signs were normal. She was preloaded with normal saline and SA was achieved with 0.5% isobaric bupivacaine 10mg. After SA, ephedrine 8mg was given repeatedly to treat hypotension. A healthy baby was delivered. After the delivery, the HR increased from 85 to 120 bpm without hypotension. Patient had no discomfort but anxious. Midazolam was given. HR returned to 90bpm after she fell asleep. In PACU, she complained of chest tightness and wound pain, but HR and BP were normal. A 12-lead ECG was obtained and no significant change compared to preoperative ECG. Fentanyl was given to resolve her postoperative pain. Chest tightness relieved afterwards. She was sent back to the ward uneventfully, and discharged after 5 days.

Discussion: WPW syndrome is often asymptomatic although in a small percentage of cases may cause significant morbidity and occasionally mortality. Pregnancy may predispose to exacerbate symptoms of paroxysmal SVT. Both mother and fetus are at risk when SVT occurs. Explanations being proposed in this occasion include hemodynamic, hormonal, autonomic and emotional changes related to pregnancy have been implicated as some of the reasons. Anesthesiologists should be aware of the possible recurrence of repeated SVT, even in the asymptomatic patient, with WPW syndrome.