A 37 year old G3P1 presented in labor for urgent cesarean section. She had a previous cesarean delivery and desired a repeat cesarean section. The patient’s past medical history was significant for a Wolf Parkinson White Syndrome (WPW). The diagnosis of WPW was diagnosed during month 7 of her pregnancy. At that time, the patient had an episode of palpitations and was brought to the emergency room. Her EKG revealed normal sinus rhythm with a WPW rhythm pattern and she was not treated with any medications. An echocardiogram showed an ejection fraction of 52% and was otherwise unremarkable. The cardiology recommendations were to avoid medication treatment at that time due to the pregnancy and then proceed with ablation during the postpartum period. The patient reported no further episodes of palpitations since her initial presentation.

To avoid sudden hypotension and the subsequent need for vasopressors, an epidural anesthetic was planned for the patient. The patient was given a 1000 cc intravenous bolus of Lactated Ringers. Anti-arrhythmic medications and a defibrillator were immediately available. After placing a blood pressure cuff, pulse oximetry and continuous EKG monitoring, an epidural catheter was placed uneventfully at L3-4. The catheter was injected with lidocaine 45 mg to test for a subarachnoid placement and 0.5ccs of air to rule out intravascular placement of the catheter. After a negative test dose was determined, the epidural catheter was bolused with local anesthetic. Despite bolusing the catheter with 20 cc 3% nesacaine and 8 cc lidocaine 2% with 1:600K epinephrine, the patient’s sensory block would not rise above T9. The epidural catheter was then removed and another epidural catheter was placed with sterile technique at L2-3. The catheter was injected with lidocaine 45 mg to test for a subarachnoid placement and 0.5ccs of air to rule out intravascular placement of the catheter. After a negative test does, the epidural catheter was then bolused with 5 cc of 3% nesacaine. A bilateral T4 sensory block was obtained. A cesarean section proceeded uneventfully and a healthy infant was delivered. An oxytocin infusion (20 units/1000ml) was started at 200 cc/hr. The epidural catheter was bolused with 4 mg of preservative-free morphine. The patient’s blood pressure and heart rate remained stable with no signs or symptoms of arrhythmia throughout the surgery and postoperative period. No vasopressor was administered during the perioperative period.

Discussion

Wolff-Parkinson White Syndrome (WPW) accounts for most of the supraventricular tachycardia arrhythmias in women of reproductive age. (1) Because the commonly used medications to treat WPW cross the placenta and are only recommended for patients with severe symptoms or sustained arrhythmias (2), the WPW patients that present to labor and delivery are often untreated.
We discuss our management of an untreated WPW parturient presenting for urgent cesarean section and review the perioperative goals and recommended anesthetic management.