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AMPHETAMINE ABUSE IN PREGNANCY: ANESTHETIC IMPLICATIONS *Kuczkowski, K.M., Benumof, J.L. Anesthesiology and Reproductive Medicine, University of California, San Diego, CA* Introduction: We present a case of an amphetamine abusing parturient who developed acute hemodynamic instability and convulsions in the immediate postpartum period and required endotracheal intubation. Report of case: A 21 y/o G2P2 amphetamine abusing female developed chest pain, hypertension, ventricular arrhythmias and convulsions with progressive desaturation in the immediate postpartum period following an uneventful term delivery. The cessation of seizures was accomplished with iv diazepam while rapid sequence induction of general anesthesia with endotracheal intubation established the airway control. The arrhythmias were successfully treated with iv lidocaine while iv labetalol restored BP to normal. No subsequent adverse events were reported and the patient was extubated after a short period of assisted ventilation. The diagnosis of eclampsia was ruled out by routine laboratory studies (liver and kidney function tests). However, toxicology screening was positive for amphetamines and patient admitted to recent drug intake. Discussion: Illicit substance abuse has crossed geographic, economic and social borders. Consequently it is not surprising to find women who abuse drugs in pregnancy. The most commonly abused substances in pregnancy include ethanol, tobacco, cocaine, amphetamines and opioids. Poly-substance abuse is common. The literature concerning management of patients with amphetamine intake is limited (1). Hypertension, tachycardia and myocardial ischemia, which can occur before, during or after delivery, are amongst the cardiovascular complications of acute amphetamine intake. Intense amphetamine induced CNS stimulation can cause confusion, hyperreflexia, and seizures. The combination of hypertension, proteinuria and convulsions resulting from acute amphetamine intake may be mistaken for eclampsia at presentation; consequently routine laboratory studies may be the key differential between the two disorders. Conclusion: This report emphasizes the need for a high index of suspicion for drug abuse in pregnancy. The diverse clinical manifestations of amphetamine abuse may be easily mistaken for other pregnancy specific disorders such as pregnancy-induced hypertension. 1. *Anesth Analg* 1979; 58:528-530.

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ANESTHETIC CONSIDERATIONS FOR INTRA-ABDOMINAL PREGNANCY *Coyne, J.T., Mitchell, J.Z. Anesthesia, University of Cincinnati Medical Center, Cincinnati, OH* An abdominal pregnancy is a rare obstetric event. There are few reports of infant and mother survival. (1-2) Atrash et al estimated that maternal mortality is 7.7 times greater in abdominal pregnancy than ectopic pregnancy, and 90 times higher than from an intrauterine pregnancy. (3) Perinatal mortality estimates range between 40-90% in abdominal pregnancy. A 34-year-old gravida 5 para 4-0-0-4 at 32 weeks gestation presented with a complaint of "abnormal fetal movement". Ultrasound revealed the possibility of an extrauterine pregnancy; MRI confirmed this diagnosis. The patient was admitted and plans were made for surgical delivery. Anesthesia evaluation revealed a healthy patient whose pregnancy had been complicated by gestational diabetes requiring daily insulin therapy, and anemia treated with iron supplementation. Physical exam was unremarkable. Preoperatively the patient was prepared with an arterial line, central venous access and two large bore IV's. Aspiration prophylaxis consisted of oral bicitra, IV fentanyl and metoclopramide. After preoxygenation, a smooth rapid sequence IV induction and oral endotracheal intubation was performed without any complications. Routine ASA monitoring, as well as CVP monitoring were employed throughout the case, and anesthesia was maintained with a balanced technique of sevoflurane, vecuronium and fentanyl. A male fetus was extracted from the right upper quadrant 2 minutes after induction. Apgar scores were 7 and 9. Birth weight was 1585 grams. After delivery the placental site began to bleed profusely, requiring massive fluid resuscitation and ultimately a total hysterectomy to control the hemorrhage. At the end of the case the patient's muscle relaxant was reversed, and extubation was performed. Mother and baby were both discharged from the hospital and are doing well. Discussion: The case presented here is exceptional in that this patient and her baby survived such a rare life-threatening event. Anesthetic considerations centered around not only the usual risks of failed intubation, ventilation and pulmonary aspiration, but also the potential need for massive fluid resuscitation. The careful attention to these details was the key to our successful anesthetic management of this case. 1) *Echenique-Elicondo M, et al. Full-term abdominal pregnancy. Mother and infant survival. J Amer Coll Surg* 2000, 192:231. 2) *Martin J, et al. Abdominal pregnancy: current concepts of management. OB/GYN* 1988, 71:549-557. 3) *Atrash A, et al. Abdominal pregnancy in the United States: Frequency and maternal mortality. OB/GYN* 1978, 69:333-337.