Abstract # 240

Anesthetic Management of Hereditary Hemorrhagic Telangiectasia in a Parturient

Abstract Type: Case Report/Case Series
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Introduction: Hereditary hemorrhagic telangiectasia (HHT) is an autosomal dominant condition that is characterized by epistaxis, telangiectases, and arteriovenous malformations (AVMs). Telangiectases are commonly found on the fingers, oral mucosa, and nose. AVMs predominantly are found in the lungs, brain, spine, and GI system. During pregnancy, changes in hemodynamic status increase the risk of complications and may cause progression of the disease.

Case Report: Patient was a 44y/o female G4P0030 at 38wks gestation who presented for induction of labor due to increasing dyspnea on exertion. She had a history of HHT, manifested as pulmonary AVMs (PAVM) and recurrent epistaxis. A left lower lobectomy, at 19y/o, for a PAVM resulted in chronic dyspnea on exertion. During her first trimester, a CT scan showed a left upper lobe AVM. Early embolization was deferred because of the risk of radiation exposure. A second trimester brain and spine MRI were negative for AVM. Upon presentation, there was no change in her baseline exam. She underwent induction of labor for vaginal delivery. An L4-5 epidural was placed and dosed with 10ml of 0.25% bupivacaine. She was maintained on a continuous epidural infusion until the delivery of a healthy infant with Apgars of 9/9. During the postpartum period, her shortness of breath resolved.

Discussion: While the majority of women with HHT undergo uneventful pregnancies, the hemodynamic and hormonal changes of pregnancy have been associated with disease progression and severe complications.1-2 Complications include systemic emboli, high output cardiac failure due to AV shunting, and ruptured AVMs. In a case series of 111 HHT affected women, 13 suffered life-threatening complications during pregnancy.2 Pulmonary AVMS occur in up to 48% of HHT patients and symptoms of dyspnea or hemoptysis should be treated as emergencies. Right to left shunting should be minimized by reducing pulmonary vascular resistance and maintaining systemic vascular resistance.3 Spinal AVMs should be ruled out and are considered a relative contraindication to neuraxial blocks.4 Repeated screening before delivery may be required since AVMs can develop and increase in size during pregnancy.

References: