**Abstract # 109**

**Anesthetic Considerations in a Parturient with a Klippel-Trenaunay Weber Syndrome**

Abstract Type: Case Report/Case Series

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**Introduction:** Klippel-Trenaunay Weber Syndrome (KTWS) is a congenital, neuroectodermal disorder characterized by cutaneous capillary malformations, venous varicosities, limb hypertrophy and is often associated with arteriovenous malformations (AVM)[1]. Anesthetic management of patients with KTWS is challenging due to the high incidence of bleeding with regional anesthesia, the frequently demonstrated connection between cutaneous vascular malformations and central nervous system hemangiomas in the same dermome,[2] and vascular abnormalities of the facial veins and jugular system [1]. In addition, poor control of hemodynamic responses to laryngoscopy could conceivably lead to a cerebrovascular accident from rupture of an intracranial AVM. Manipulation of the airway could lead to significant bleeding if a vascular malformation is present. This case presents the anesthetic management of a parturient with KTWS.

**Case Presentation:** A 31 year old, G2 P1 with KTWS and history of prior cesarean section (CS) presented at 39 weeks gestation and had been on low molecular weight heparin for thromboprophylaxis prior to admission. Examination revealed no vascular malformations in the airway or the birth canal. A perinatal MRI revealed vascular malformations and bony deformities in the lumbar and thoracic spines respectively. Due to these abnormalities, regional anesthesia was avoided. For cesarean delivery, general endotracheal anesthesia was performed with rapid sequence induction using propofol and succinylcholine. The patient was hemodynamically stable throughout the procedure. The procedure was performed without complications and the post-operative course was uneventful.

**Discussion:** KTWS can affect the vasculature and/or soft tissue on any part of the body, however, it is most commonly seen in the extremities. It is crucial for anesthesia providers to know all areas affected by this syndrome, particularly in the lumbar spine, oral cavity, and airway, since these will guide the overall anesthetic plan. The risks associated with regional anesthesia in the presence of spinal abnormalities may lead to neuraxial hematoma formation, which may be further compounded by a consumptive coagulopathy[3]. Regional anesthesia was avoided in this patient because of the lumbar AVM. In addition, the patient’s airway was free of an AVM and was not an anticipated difficult airway. We believed the risks of regional anesthesia outweighed the risks associated with general anesthesia in this case.

**References:**