Abstract # 262

**Anesthetic Management of Pregnant Patient with Critical Aortic Coarctation**

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**Background:** Aortic Coarctation (AC) is defined as a narrowing of the aorta most commonly found in the region of the ligamentum arteriosum, adjacent to the origin of the left subclavian artery. It accounts for 6-8% of all Congenital Heart disease. 80% of cases are diagnosed and corrected during infancy or childhood. We present a case of a young woman first diagnosed of having a critical AC at 27 weeks gestation.

**Case:** An 18-year-old premigravia was referred at 27- w gestation with a suspected pregnancy induced hypertension. She was known as a healthy, active, short stature (1.45m) young woman with elongated face and rt. eye ptosis. Her arm/leg blood pressures (BP) were 160/80 and 80/55mmHg with an 80mmHg systolic gradient. Physical examination disclosed a grade 3/6 systolic murmur over the entire left hemithorax and absens of puls on femoral arteries. Echocardiography and MRI recognized critical 4mm diameter AC at level of the left subclavian artery. The patient was hospitalized and placed on Bisoprolol with a need for frequent dose elevations to reach a BP of less then 160 mmHg systolic. At 32 weeks gestation her blood pressure reached 190/100 and CS was performed in the cardiac operation suite. Standard monitoring was extended by radial and dorsalis pedis arterial lines and CVP (introducer for Swan-Gans catheter). CSE anesthesi was performed at L3-4 and 2.5 mg 0.5% hyperbaric Bupivacaine, 150 µgm Morphine and 15 µgm Fentanyl were injected in the subarachnoid space; 2 doses of 5 mL 2% Lidocaine were added in epidural over 30-min period. The patient remained stable, her blood pressure was 150-180 over 80-90 mmHg in the upper limb and 70-110 over 50-60 mmHg in the lower part of her body. Heart rate was 60-70 bpm and oxygenation 98-100%.

After uneventful operation the patient was transferred to CCU for 48h monitoring and 13- days later the patient was discharged home. Here healthy preterm 1990 gm male baby (Apgar 8/8) was remained in the NICU for 4 weeks. 8 weeks after CS she had a successful cardiac catheterization with balloon dilatation and stent insertion. (Pic 1)

**Discussion:** Anesthetic management of patient with AC focuses on maintaining hemodynamic stability. Increasing in systemic vascular resistance as a result of increased sympathetic tone (labor pain, pushing or endotracheal intubation) can exacerbate hypertension at upper part of the body and lead to cardiac failure and cerebral hemorrhage. Decreasing in systemic vascular resistance,