26434 - PERIPARTUM ANESTHETIC MANAGEMENT OF “PULSLESS” DISEASE.

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Introduction: Takayasu (pulsless) disease (TD) is chronic, progressive inflammatory occlusive arteritis of the aorta and aortic branches. Estimated incidence is 1:100000 but almost 80% are women in second and third decades of life. Reports of worsening of ischemic symptoms, cardiac failure, hypertension and cerebral hemorrhage has been reported during pregnancy.

Methods: We reviewed the peripartum records of all parturients with the diagnosis of TD who were treated in Shaare Zedec Medical Center (Jerusalem, Israel) between the years 1990 and 2005.

Results: There were three patients with four deliveries. The first patient- 30-y old primigravida at 35 weeks with history of TD complicated with CABGx2 (LAD and LM) at 23-y old and significant occlusion of the left subclavian, vertebral and carotid arteries and partial occlusion of the right subclavian and superior mesenteric arteries. There were no peripheral pulses except the right dorsalis pedis. She had a C/S because of severe symmetric IUGR with standard monitoring (NIBP on Rt. Ankle) and slowly titrated epidural (16ml of 0.5% bupivacaine and 20µg fentanyl). The second patient had TD with significant bilateral stenosis of the carotid and subclavian arteries, pulseless left arm and left leg. Her first C/S for symmetric IUGR performed with slowly titrated epidural (15ml 1.5% lidocaine, 5ml 2% lidocaine and 75µg fentanyl). Four years later she had “new” bilateral renal artery stenosis, obstruction of vertebra-basilar arteries and no right radial pulse. Her C/S performed with CSE (spinal consisted of 5 mg 0.5% hyperbaric bupivacaine and 150µg morphine; the epidural component consisted of 5ml 2% Lidocaine). The third patient was a 31-y old; 40w; G3P2 for vaginal delivery. She had a history of aortic coarctation repair at 9-y-old, her TD complicated with significant stenosis of Rt. Subclavian, occlusion of Lt. Internal Carotid arteries, aneurismatic enlargements in Rt. Innominate artery (1.5 cm) and Rt. Subclavian artery (3 cm). L3-4 Epidural analgesia was provided with two 5ml’s doses of 0.125% bupivacaine and 50µg fentanyl injected. The patient was hemodynamically stable and had normal vaginal delivery. All patient had unremarkable postpartum period and good newborn outcome.

Discussion: The best anesthetic management for the parturient with TA is controversial. General anesthesia may be associated with hypertension, heart failure and intracranial hemorrhage. Regional anesthesia, especially spinal, is associated with sympathetic block, blood pressure decreasing and worsted tissues oxygen supply. Cerebral perfusion can be assessed easily in an awake patient. Monitoring of pulseless patient is an additional challenge for perioperative care. . In summary: anesthetic support with adequate preloading, slowly titrated epidural or combined spinal-epidural with reduced dose of spinal anesthesia prevents a further decreasing in blood pressure and minimizes peripartum complications.