We reported four cases of prenatal diagnosis of Vein of galen aneurysm (VGA)

**Case 1:** Patient referred at 33 weeks of gestation. Ultrasound findings showed a 28x30x28 mm supra tentorial midline anechoic mass with turbulent flow at color Doppler examination. Mild cardiomegaly, right atrial dilatation, and mild tricuspid insufficiency, without hydrops. Diagnosis of VGA was made. At 40 weeks newborn was delivered by cesarean section. VGA diagnosis was confirmed. Newborn evolves with cardiac failure requiring diuretics and milrinone, with its resolution embolism therapy will be initiated.

**Case 2:** Patient was referred at 36 weeks of gestation. Ultrasound examination showed a 30 x 28 x 21 anechoic cranial image with venous flow at color Doppler. Without cardiac failure. VGA diagnosis was made. Delivered at 38 weeks by cesarean section and the VGA diagnosis confirmed. The patient was subject of embolism and die due severe secondary thrombocytopenia.

**Case 3:** Patient referred to our center at 25+1 weeks gestation with cerebral mass diagnosis. Ultrasound examination showed a 28 x 17 x 30 mm central lesion with present Doppler flow. 3D revealed dilatation of the entire cerebral venous system. Diagnosis of VGA was made. Patient still pregnant.

**Case 4:** Patient was referred with a 32+ 6 week bicornal biamniotic twin pregnancy. Ultrasound examination showed in A twin, multiple cystic cranial areas with blood flow presence and disorganized brain parenchyma. The fetus was hydropic and the functional cardiac evaluation evidence a heart failure at expense of right cavities. Diagnosis of VGA with heart failure was made. B twin ultrasound examination was normal. In a further control death of the A twin was objectivized. Delivery at 34 weeks cesarean section, A twin stillborn. B twin was normal.

**VGA is a uncommon diagnosis and constitute 1% of all intracranial vascular anomalies. Antenatal diagnosis and referral to a center with facilities for advanced neonatal cardiac care and neuroradiological therapy can improve the prognosis.**