

defect is very rare and did not interfere with the outcome. Finally we encourage a routine re-evaluation of skull and brain anatomy after birth to confirm prenatal findings, and to screen undetected defects.

Supporting information can be found in the online version of this abstract.

Sagittal MRI image of the two skull lesions – cephalocele

P03.10 Two and three dimensional sonographic images of isolated partial agenesis of corpus callosum

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We report a rare case of isolated partial agenesis of corpus callosum (PACC), and describe the prenatal two- and three- dimensional (2D and 3D) sonographic images. Routine scan was performed on a 32-year-old healthy woman at 20 weeks' gestation of her second pregnancy. Both cerebral lateral ventricles were mildly dilated (left side 1.06 cm and right side 1.04 cm). Subsequent trans-abdominal detailed scan showed mildly dilated cerebral lateral ventricles with tear drop appearance and dilated third ventricle (0.4 cm). Cavum septum pellucidum was not visualized. Although the anterior part of corpus callosum was seen on 2D median planes by aligning the transducer with the anterior fontanelle and midline sutures, its middle and posterior part was not visualized. Color Doppler examination showed only the anterior part of the callosum artery. Median planes were also reconstructed using 3D ultrasonography by multiplanar and multislice analysis of static volumes. There was a good correlation between 2D and 3D images. 2D images could be used for diagnosis. Addition of 3D multiplanar and multislice images confirmed the non-visualisation of middle and posterior part of corpus callosum (Fig 1). MRI brain showed similar findings, and there were no additional abnormalities. Amniocentesis showed normal karyotype, 46 XX. Maternal blood was negative for cytomegalic virus antibodies. The couple was counseled that the prognosis was variable with a risk of neurodevelopmental delay. After termination of pregnancy, pathological examination was performed on the abortus.

Supporting information can be found in the online version of this abstract.

Three-dimensional multiplanar (plane A and B) images of a fetus with partial agenesis of corpus callosum. In plan A, only the anterior part of the corpus callosum was seen.

P03.11 Three dimensional extended imaging in the prenatal diagnosis of Galen vein aneurism: a case report

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Galen vein aneurism (GVA) corresponds to a vascular dilation of the sinus venous in central nervous system (CNS). GVA is a rare category of congenital anomalies with a high mortality in neonatal and pediatric life. Regular diagnostic methods consist of 2D ultrasound and transvaginal neurosonogram when possible. Arteriovenous malformation are a heterogeneous group of dilated deep vein anomalies of Galen system with abnormal communications of the mid line. It is presented in 1 : 250000 deliveries. Main complications

include heart failure in the neonatal period, hydrocephalus, brain calcifications, encephalomalacia, cerebral atrophy, bleeding and neurological progressive compromise. We describe a case of GVA diagnosed at 38 wo. Fetal evaluation was performed using Accuvix V10 ultrasonographic equipment (Medison. Seoul-Korea). Cerebral images were obtained using Virtual Organ Computer-aided AnaLysis (VOCAL™, 3DXI, Medison Sonoview Pro, Seoul, Korea) with 30 degrees swept. The obtained volumes were analyzed in the post-processor software 3DXI viewer and clinically correlated. It is a 19 yo, gravida 1, Para 0. She was evaluated in regular sonogram. The CNS evaluation revealed hypoechogenic mass in the mid brain, between the brain peduncles, behind the talami and under the corpus callosum. Transvaginal neurosonogram was performed with same findings, power angio Doppler revealed a vascular composition of the image with venous flow pattern in Pulsed Doppler Evaluation. A GVA was suspected. Patient underwent Cesarean section for obstetrical reasons and a 3410 grams female infant was delivery with APGAR 8 and 9. No hemodynamic decompensation was observed. MRI and CT scan confirmed diagnosis. Baby was discharged 3 days later. Although GVA is an uncommon life threatening condition, arteriovenous malformations are the most frequent vascular congenital anomalies in central nervous system. 3D ultrasound and post process software allow improving the accuracy of the 2D ultrasound when making central nervous system evaluation.

P03.12 Posterior fossa arachnoid cyst: value of mid-sagittal view of the vermis

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Primary arachnoid cysts are benign, non-communicating fluid collections within arachnoid membranes. If located in the posterior fossa, they can be confused with Dandy-Walker malformation (DWM), inferior vermian hypoplasia, mega-cisterna magna, and Blake's pouch cyst. We report a case misdiagnosed as DWM. A 30-year-old G3P2 woman was referred at 37.5 weeks gestation. The couple is healthy, non-consanguineous and of Caucasian descent. Ultrasound at 20 weeks was normal. Another ultrasound was performed at 37 weeks due to decreased fundal height, with a diagnosis of DWM. Repeat US at our institution showed a female AGA fetus. BPD was 9.8 cm and head circumference (HC) 35 cm (both at 95th centile). There was marked dilatation of both lateral ventricles (atrial width 20 mm) and third ventricle (13 mm). Cisterna magna measured 23 mm. It was continuous with a large 5.5 × 4.5 × 3.5 cm cyst in the posterior fossa, which contain several septa. Transverse cerebellar diameter was normal for gestation. Mid-sagittal view of the posterior fossa showed normal morphology of the vermis with small 4th ventricle. The cyst was posterior to the cerebellum, with mass effect on the cerebellum and elevation of the torcular. These findings of a retrocerebellar arachnoid cyst causing ventriculomegaly were confirmed with subsequent fetal MRI. Delivery was at 39 weeks gestation by Caesarean section. The baby's birth weight was 3.6 kg (50th–90th centile), length 51 cm (50th centile) and HC 38 cm (97th centile). Her APGAR scores were 9 and 9 at 1 and 5 minutes respectively. A shunt was inserted into the cyst at 16 days of age with decrease in size of ventricles and head circumference. She has been discharged home and is now 23 days old. This case shows the importance of evaluating the vermis by obtaining a mid-sagittal view, either by transvaginal ultrasound (if cephalic presentation) or by reconstruction from a 3D volume acquired in the axial plane. Both of these approaches were used in this case.