

fourth day of life she presented seizures of myoclonic type and typical EEG findings.

Only a few cases have been diagnosed before birth. In this case the association of agenesis of corpus callosum and ocular compromise were the clue to prenatal diagnosis.

We emphasize the search of subtle ocular abnormalities each time we have hypogenesis or agenesis of corpus callosum.

P02.14

Rotation of the vermis in the fetus as a possible etiology for enlarged posterior fossa

Y. Zalel¹, Y. G. Gilboa¹, L. G. Gabis², L. B. Ben-Sira³, R. A. Achiron¹

¹Department of Obstetrics & Gynecology, The Chaim-Sheba Medical Center, Tel-Hashomer, ²Department of Pediatric Neurology, The Chaim-Sheba Medical Center, Tel-Hashomer, ³Pediatric Radiology, Sorasky Medical Center, Tel-Aviv, Israel

Objective: To describe the possibility of rotation of the vermis as the cause of enlarged posterior fossa in the fetus.

Methods: Eight women were referred to our ultrasound unit for evaluation of enlarged posterior fossa with suspected agenesis of the vermis on axial plane. All women underwent thorough ultrasound evaluation, including demonstration of the posterior fossa on mid-sagittal plane with measurements of the vermis. All patients received a genetic as well as pediatric neurologist consultation.

Results: The mean age of the women was 27 (with range of 20–33) years and the mean gestational week at diagnosis was 19.5 (with range of 15–25). On standard axial plane, there was a “direct communication” between the cisterna magna and the 4th ventricle. On mid-sagittal plane, however, the vermis could be very well delineated with slight anterior rotation. Its measurements were within normal limits for gestational age. The normality of the vermis was confirmed in prenatal MRI in 2 cases, on postnatal MRI and/or US in 5 cases and in PM in one case. The 7 alive children are well developed with no neurological sequels after a mean follow-up of 4 years (with range of 1–7.5).

Conclusion: The demonstration of the normal vermis on mid-sagittal plane in cases with “enlarged posterior fossa” on standard plane raises the possibility of rotation of the vermis. We suggest that in every case of enlarged posterior fossa or suspected vermian agenesis, the mid-sagittal plane should be utilized and rotation of the normal vermis should be excluded.

P02.15

Prenatal diagnosis of tetrasomy 9p associated to Dandy-Walker malformation

H. Werner¹, F. M. Peixoto-Filho², J. Mello², R. Zlot², J. Llerena², F. Guerra²

¹CDPI, Brazil, ²IFF-FIOCRUZ, Brazil

A 23-year-old woman was referred to our service, presenting a high risk for aneuploidy in the first trimester screening (Nuchal translucency: 2.9 mm, at 11 weeks). The genetic investigation was offered and the patient opted for amniocentesis. In 50 analyzed cells were identified 47,XY, with complete tetrasomy of the short arm of chromosome 9. The sonographic evaluation demonstrated subcutaneous edema, bilateral clubfoot, hiperecogenic kidneys with bilateral pelvic dilatation, Dandy-Walker malformation, retrognathism, ventriculomegaly, labial cleft, palatine cleft and artrogryposis. At the 30th week the patient presented premature rupture of the membranes followed by a premature detachment of the placenta. An urgent cesarean section was performed with extraction of neonate with indeterminate sex, weighing 1120 g, Apgar 1/3/1. The neonate died 41 minutes after the birth. Until now, only 35 cases had been described with the tetrasomy of

9p. This is a chromosomal aberration where the short arm of chromosome 9 appears 4 times (tetrasomy) instead of the 2 times, in somatic cells. The tetrasomy of 9p appears as result of a sporadic genetic error. The prognosis is poor and the child generally dies. The first report of prenatal diagnosis was in 1991. Four cases of tetrasomy of 9p had been described associated with Dandy-Walker malformation. This case together with the other four, indicate that this chromosomal aberration must be investigated when the Dandy-Walker malformation is detected in the prenatal ultrasound.

P02.16

Diagnosis and clinical attendance on fetuses with Galen's vein aneurysms – Report of two cases

H. Werner¹, J. C. Zirreta², C. Gikovate³, P. Daltrio¹, L. Pereira¹, T. M. Fazecas¹, R. C. Domingues¹, C. P. S. P. Werner⁴

¹CDPI, Brazil, ²UERJ, Brazil, ³Clínica Neurológica Prof. Fernando Pompeu, Brazil, ⁴CPDT, Brazil

Aneurysms of the vein of Galen (AVG) is a heterogeneous set of anomalies characterized by dilatation of the venous structure of the galenic system. Such anomalies account for less than 1 percent of the malformations of the central nervous system.

Two fetuses with gestational ages of 28 and 29 weeks were referred to medical examination for confirmation of cyst at the median line of the cephalic pole. Color Doppler confirmed AVG. Magnetic resonance was performed in the 29th and 34th weeks, displaying clearly the lesion with hyposignal in the T2-weighted sequence. Both gestations developed to term without any intercurrent events; cesarean sections were performed in the 38th week with fetal extractions of 2.940 g and 2.840 g. One of the children failed to make it and died of heart complications. The other child underwent embolization of the pericallosal artery with the placement of 2 coils as well as of the posterior and lateral choroidal arterial branches (16 coils) on the 23rd day of life. This was obtained by means of catheterization of both the right femoral artery and the left femoral vein. The infant's evolution was quite satisfactory, acquiring its normality up to one year of age.

AVG is a grave and serious condition which at times leads to stillbirth. An ultrasound test is an effective diagnostic method of visualizing the hypochoic image posterior to the third ventricle and still the turbulent bidirectional flux to color Doppler. Magnetic resonance can also identify these findings as an expansive lesion with heterogeneous signal, which is predominantly hypointense due to flux turbulence. Parenchymatous alterations associated with secondary hemorrhage to thrombosis and hydrocephaly can still be visualized. Both pre- and postnatal echocardiographic approaches play an important role in identifying signs of heart failure. The treatment consists mainly of vascular embolization with obliteration of the arteriovenous fistula.

P02.17

Perinatal outcome of vein of Galen aneurysms (VGA). Report of two different cases. 3D Doppler color imaging

J. Ochoa, P. F. De Marco, S. Roberts

Diagnos, Centro Privado de Estudios Ultrasonograficos, Argentina

The VGA are infrequent cerebral malformations that arise as result of persistent abnormal arteriovenous connections. The fetal clinical course may be quite different depending on the amount of shunt and the number of fistulae.

The first case, a 32 year old, gravida 3, para 2, was admitted at 35 weeks of gestation for routine US examination. At this time an oval cystic like structure, posterior to the third ventricle was detected. Color and pulsed Doppler showed the presence of turbulent high velocity flow. Cerebral ultrasound and magnetic resonance after