Fetal stroke: The purpose of clinical case

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Introduction: The ischemic or hemorrhagic perinatal stroke results from focal disruption of cerebral blood flow and occurs between the 20th week of pregnancy and 28 day life. It has an incidence of 1-2300/5000 and estimated mortality of 3.49/100,000.

Clinical Case: Brain changes were detected in the ultrasound of third trimester of a 31 year old pregnant woman. Magnetic brain resonance imaging at 36 weeks showed frontal cortico-subcortical brain damage, corona radiata and caudate-likely cerebral infarction sequela. Eutocic delivery at 37 weeks was induced and apgar score 1'/ 5'/ '10' of 09/10/10 was obtained. The objective examination showed craniotabes and open sutures. Post natal ultrasound of abnormalities consistent with infarction of the middle cerebral artery, in association with midline shift to the right hydrocephalus and clots in the lateral ventricles was confirmed. Brain CT revealed: severe hydrocephalus, Cerebral NMR revealed: likely cyst porencephalic, small synechia/hematogenous deposition in the cerebral aqueduct. It was impossible to hold cerebrospinal fluid flow study, submitted endoscopic ventriculostomy of the third ventricle in day10 life. Echocardiography and electrocardiogram revealed no significant changes. Study of coagulation showed no changes. Thrombotic study revealed no change in AT III; protein C and S. Lipid profile showed no change and anti-cardiolopina antibody was negative. Research of collagen mutation 41 A was negative.

Conclusion: The ischemic stroke in utero is typically a clinically silent event and a varied etiology (fetal and maternal risk factors). The detection of ultrasound prenatal changes leads to the realization of fetal NMR allowing the etiologic diagnosis and proper orientation as in this case.

Biography
Tania Sofia Leano Martins has completed her Medical Schooling from Medical School of Porto with 15 values and now is pursuing Pediatrics Specialty. She is a Trainer of advanced support of pediatric life as part of the Portuguese pediatric resuscitation group and Volunteer Teacher of pre-graduated Pediatrics practical and theory classes of Master’s degree in Medicine from Oporto Medical Schools. She has attended several courses with evaluation like 11th European Post-graduate course in Neonatal and Pediatric Intensive care. She has presented several clinical studies in national and international conferences and published in the form of book chapter themes: Tuberculosis in pediatrics age and Neutropenia in Pediatrics.

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