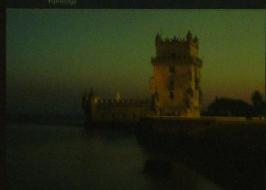


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Objective: Fetal mediastinal teratomas are rare congenital germ cell tumors that can compress mediastinal structures and cause nonimmune hydrops.

Method: The authors present a case of a 36 years old woman, gravida 1, para 0111. Ultrasound evaluation at 21 weeks of gestation revealed fetal hydrops and suggested a diaphragmatic hernia with severe bilateral lung hypoplasia. An amniocentesis was performed and showed normal chromosomes, 46, XY. At 22 weeks of gestation a medical interruption of pregnancy was performed.

Results: The post-mortem examination revealed a massive tumor of the anterosuperior mediastinum with cardiac and bilateral lung compression and fetal hydrops. The tumor was solid, encapsulated, 34,59 g of weight and $5\times4,5\times3$ cm. Histological examination revealed a solid teratoma composed of mature tissues admixed with immature neuroglial elements. **Conclusion:** This rare condition, that could have an adverse outcome, should be included in the diagnostic evaluation of any case of second trimester nonimmune hydrops, associated with severe lung hypoplasia.

PS-05-014

Heterotaxy syndromes: A case report of Ivemark syndrome C. Callé*, A. Rodrigues, A. Teixeira, L. Caceres Monteiro *IPO Lisboa, Anatomia Patológica, Portugal

Objective: The heterotaxy syndromes are rare diseases with an incidence of 1–1.5/10,000 live births. These complex entities are associated with numerous malformations, in particular, complex cardiac and extra-cardiac malformations that have an important impact on the prenatal and postnatal course. Right isomerism has a high postnatal mortality due to the more complex type of cardiac defects.

Method: We report a case of medical interruption of pregnancy at 25-week of gestation, due to severe cardiac abnormalities incompatibles with life. The echocardiography revealed a fetus with total anomalous pulmonary venous drainage, atrioventricular septal defect, and right side truncus arteriosus of aortic type. No other malformations were detected in morphologic ecography.

Results: The autopsy confirmed the complex heart defects and revealed bilateral trilobed lungs and asplenia, settling the diagnosis of Ivemark Syndrome.

Conclusion: The Ivemark complex (OMIM 208530) is a malformation with bilateral right-sidedness, with a Mendelian autosomal recessive inheritance, included in the group of Heterotaxy syndromes. The exact diagnosis of this entity is mandatory for adequate genetic counselling of the parents and for planning the postnatal care in a new pregnancy.

PS-05-015

Contribution of fetal autopsy for diagnosis of Beckwith-Widemann Syndrome (BWS)

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Objective: Omphalocele is recognized as congenital malformation with a high mortality. It is associated with other congenital malformations.29 % has abnormal karyotype. The aim of the present study is to show the importance of perform the foetal autopsy in the legal interruption of the pregnancy with fetal diagnosis for scan of omphalocele.

Method: Fetal autopsy,histopathologic examination and molecular analysis were performed in a male fetus:46 XY karyotype,therapeutically aborted at 21 weeks of gestation with scan of omphalocele.

Results: Gross examination showed a male fetus with omphalocele and his weight corresponded to 24 weeks of gestation. Histologic showed adrenocortical cytomegaly which suggested the presence of BWS.We revised again grossly the fetus and we found that BWS was confirmed by the existence of his 3 criteria;macroglossia, omphalocele,macrosomy. Accompanied by minor signs: hemihypertrophyfacial,ear-creases, hepatomegaly.

Molecular analysis revealed loss of methylation at IC2 (KvDMR); the most common genetic alteration associated with BWS.

Conclusion: BWS is an overgrowth disorder with variability in clinical manifestations and molecular causes. Their manifestations are highly variable with some cases lacking one or more of the hallmark features. In our case the existence of the 3 criteria help us in our diagnosis. The pathognomonic histologic feature in BWS is the adrenocortical cytomegaly. We present one BWS case diagnosis by a meticulous autopsy and our molecular diagnosis is consistent with that described thus far. We want to highlight the importance of the fetal autopsy and its histological study.

PS-05-016

Microscopic features of kidneys in newborns born to mothers with preeclampsia

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Objective: The purpose of the study is to identify the microscopic features of kidneys in newborns born to mothers with complicated pregnancy by mild preeclampsia.

Method: The material for this study was the tissue of kidney, stained with hematoxylin and eosin according to van Gieson. All material was divided into two groups: 1 group—controls (3 cases) comprising the newborns from mothers with physiological pregnancy, 2 group-study group (7 cases) comprising newborns born to mothers whose pregnancy was complicated by mild preeclampsia.

Results: In kidneys of newborns of the second group embryonic glomeruli predominated; small areas of focal dysplasia and some glomeruli with the cyst formation were present; sclerotic processes in the glomeruli and interstitial tissue increased; the features of blood circulation disturbance characterized by hyperemia of peritubular and glomerular capillaries were noted. Mainly in the newborns of group 2, small foci of marked sclerosis with solitary lymphoid cell infiltrates were determined in cortical area of kidneys. Renal tubular epithelium of children from group 2 was characterized by focal degenerative changes.

Conclusion: Structural changes, identified in the kidneys of newborns born to mothers with complicated pregnancy may create the conditions for development of nephropathology in these children in future ontogenesis.

PS-05-017

Placental pathology in cases of pregnancy, complicated with uterine leiomyoma

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Objective: It is now known that uterine leiomyoma (UL) has a negative effect on women's reproductive health contributing to a variety of gestational complications. It increases risk of perinatal lethality of a child. Pregnancy with this tumor is frequently accompanied by clinical and morphological manifestations of placental insufficiency. The aim of this study was to examine peculiarities of placental and fetal growth in case of gestation, complicated with UL.

Method: Thirty five placentas from pregnancies, complicated with UL and ten placentas of women with physiological pregnancy (controls) were studied by organometry, histology and computer morphometry.

Results: The results have shown that the weight of the placenta, maternal surface square and fetal-placental ratio in the main group of observations exceeded the results in control (p<0.05). Placental volume for women with UL did not reach the control value (p<0.05). The fetal weight did not have statistically significant differences. Placental pathology correlated with the place of placentation and neighborship to the leiomyoma.

