



Supratentorial Cysts: Prenatal Diagnosis and Outcome

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Abstract

Fetal intracranial cysts are cerebral lesions arising in cerebral parenchyma or ventricles classified into three groups: intraparenchymal cysts which include periventricular pseudocysts and porencephalic cysts; intraventricular cysts comprise choroid plexus cysts and extra-axial cysts composed of arachnoid cysts and cavum veli interpositi cysts. When intracranial cyst is found, it is necessary to evaluate the position, the dimension, the relationship with other intracranial structures, the presence of a solid tissue and vascularization with color Doppler. This review describes the prenatal sonographic findings of the fetal supratentorial cysts, their association with central nervous system (CNS) and extra-CNS anomalies, their clinical significance and their outcome. Porencephalic cysts are the result of an ischemic event that leads to a focal necrosis of cerebral tissue. The prognosis is generally poor and depends upon the position of lesions and from how much brain tissue has been destroyed. Periventricular pseudocysts (PVPCs) are cystic cavities that lack the ependymal cell lining found in true cysts. They have been described in association with congenital infection, metabolic disorders, maternal cocaine abuse and chromosomal aberration. In most cases PVPCs have been reported as isolated findings with no clinical significance. Choroid plexus cysts (CPCs) are angiomatous enlargements of capillaries of the choroid plexus. When CPCs are isolated, in the majority of cases, disappear with advancing gestation. Arachnoid Cysts are cystic collections of fluid formed by the duplication or splitting of the arachnoid membrane. The prognosis of a fetus with an arachnoid cyst mainly depends on the presence of associated malformations within or outside the CNS, or the progressive enlargement of the cysts. Cavum veli interpositi cysts are liquid collections within the space situated in the antero-inferior part of the splenium of the corpus callosum. The prognosis is generally good. Few cases are described in literature with intracranial- and extracranial-associated anomalies in about 31 and 6% respectively.



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Biography

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Publications

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