PROGNOSIS:

Prognosis: Neural tissue from CSF and vessels.

A cranial defect with mass projecting through it and distortion of the adjacent brain parenchyma. On Fetal MRI the bony margins of the defect may be difficult to resolve. It is important to assess the intracranial structure herniating through the defect. T2 WI is the best sequence for distinguishing neural tissue from CSF and vessels.

Prognosis: Worse prognosis with large amount of herniated tissue and other intracranial anomalies.

REFERENCES


ORBITAL HEMANGIOMA

Orbital hemangiomas are benign infantile orbital endothelial cell neoplasms. They are also called Orbital capillary hemangioma, benign hemangioidoendothelioma or infantile pericellular hemangioma.

Imaging Findings:

Lobulated irregular mass involving any area of the orbit with a predilection for superior orbit, eyelids and supranasal region. They are usually superomedial extracranial in location but may extend into the superior orbital fissure. Ultrasound demonstrates high flow supply and drainage. On Fetal MRI hemangiomas are heterogeneous and iso or hypointense on T1 WI and heterogeneous and hypointense on T2 WI. Flow voids may be visible. Postnatally the diagnosis can be confirmed by diffuse intense enhancement.

Prognosis:

A period of rapid growth occurs during the first 6 to 18 months of life. Spontaneous regression usually begins after the 1st year and the hemangioma may take 5 to 10 years to involute.

LYMPHATIC MALFORMATION

Lymphatic malformations are an abnormal collection of lymphatic vessels. They can be microcystic or macrocystic; unifocal, multifocal or diffuse. They are also called cystic hygroma or lymphangiomata.

Imaging Findings:

Transpatial multicystic mass with fluid-fluid levels. They can occur in any location in the head and neck. Fetal MRI demonstrates the extent of the lesion and presence of fluid-fluid levels.

Prognosis:

If venous return is obstructed, hydrops develops. If hydrops develops the outcome is poor. The lesion can compress, infiltrate or encase the airway. Postnatal treatment includes percutaneous sclerotherapy and/or surgical resection.

DISCUSSION

Fetal MRI is an extremely useful adjunct in the evaluation of lesions around the head and neck. Fetal MRI can adequately assess the fetal airway which can be visualized on T2 WI because of high signal fluid in the larynx, trachea and bronchi. The amount of tracheal deviation and compression can be visualized. The mass can be evaluated in three planes and the exact extent of the mass and location of solid and cystic components can be assessed. Fetal MRI thus aids in fetal and postnatal interventional planning.