Image Article

SCHIZENCEPHALY

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ABOUT THE IMAGE

A 3 year old female child was brought by her mother to the clinic complaining that her child was not being able to walk and speak properly till date. Child was delivered at term following vaginal delivery without complication. There was no history of consanguineous marriage, maternal illness or any medication consumed during pregnancy. Developmental history showed global delay in developmental milestones. On neurological examination, spastic hemiparesis was noted in her right upper and lower limbs. Cranial nerve examination was within normal limit. Sensory examination could not be elucidated due to communication barrier with the child. Plain CT scan of head was planned which revealed cleft in the left cerebral mantle, Schizencephaly. It is a rare congenital disorder characterized by cleft in cerebral mantle which results from the failure of the normal migration of the primitive neural cells resulting in cerebrospinal fluid filled cerebral cleft, lined by grey matter. The dilated body of left lateral ventricle communicating with a large cerebrospinal fluid collection in left cerebral hemisphere was noted (Figure 1). The communication was extending from ependymal surface of the ventricle up to the cerebral cortical surface (Figure 2). The fluid collection was lined by heterotopic gray matter. There was no other obvious nervous system anomaly detected in plain CT scan. Diagnosis and prognosis was explained to the mother. Physiotherapy was started in view of gross and fine motor developmental delay, spasticity and hemiparesis. Part of physiotherapy included Vojta therapy in order to improve postural regulation, uprighting of the body against gravity, grasping and stepping movement of the limbs. Stretching and strengthening exercises was also done in order to reduce the spasticity and to improve strength of the limbs and trunk. The child has been showing symptomatic improvement following regular physiotherapy sessions in over two month time period. Schizencephaly is a rare birth defect characterized by cleft in the cerebral mantle.

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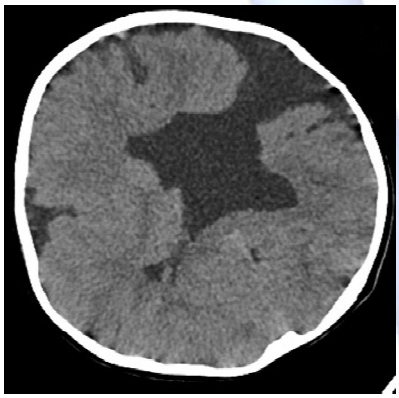

Fig. 1: Non contrast CT scan of head (Axial view) showed the dilated body of left lateral ventricle communicating with a large cerebrospinal fluid collection in left cerebral hemisphere. Thinning of the left parietal skull rim was also noted. There was no other obvious nervous system anomaly detected in plain CT scan.

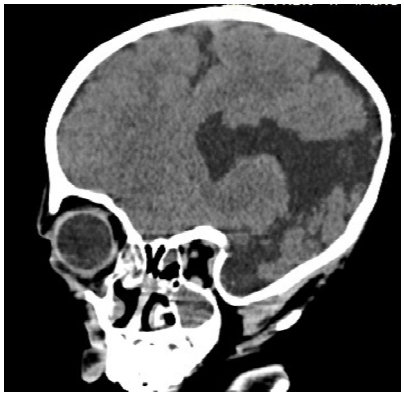

Fig. 2: Non contrast CT scan of head (Coronal view) revealed that the communication was extending from ependymal surface of the ventricle up to the cerebral cortical surface. The fluid collection was lined by heterotopic gray matter. There was no other obvious nervous system anomaly detected in plain CT scan.

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