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Intracranial Giant Interhemispheric Arachnoid Cyst in a Two Year Old Boy

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Abstract

Giant interhemispheric arachnoid cysts are rare lesions. These are generally associated with midline neurodevelopmental anomalies as seen in aforementioned case (2, 3). Treatment of these lesions is controversial. None of the surgical techniques described has proven superiority over others.

Conservative management can be considered irrespective of the size in cysts with no change in size or raised ICP. We are reporting a case of giant intracranial interhemispheric arachnoid cyst in a 2year old male child.

Key words: Giant interhemispheric; Arachnoid cysts; Neurodevelopmental anomalies.

Introduction

A 2 yr old male child was referred to the outpatient clinic by a pediatrician with abnormally large head size and delayed mile stones. Examination showed a head circumference of 58 cms. The child was able to take few steps and could speak two syllable words. The anterior fontenelles were partially closed and fundus appeared normal. MRI brain showed a large mid line interhemispheric cystic mass with complete agenesis of the corpus callosum and underdeveloped cerebral hemispheres. The right cerebral hemisphere shows an incompletely formed lateral ventricle. Third ventricle is ballooned abutting the inferior surface of the arachnoid cyst. Endoscopic fenestration of the cyst was planned but the parents opted for conservative management. At 6months of follow up the patients language and motor skills have improved but still inappropriate for the age. The cyst size remains the same on MRI.

Discussion

Arachnoid cysts are congenital lesions that arise during development by splitting of the arachnoid. Only 5% of arachnoid cysts are interhemispheric in location (1). Giant interhemispheric arachnoid cysts are rare lesions. These are generally associated with midline neurodevelopmental anomalies as seen in aforementioned case (2,3). Patients demonstrating enlarging cyst size on serial imaging or raised ICP features undisputedly require surgery. The approach for management of the cysts with epilepsy, headache and psycomotor development retardation is controversial(3,4,5). It is difficult to establish the cause and effect relationship in such patients. Various surgical options available include craniotomy and excision, endoscopic approaches, stereostactic cyst

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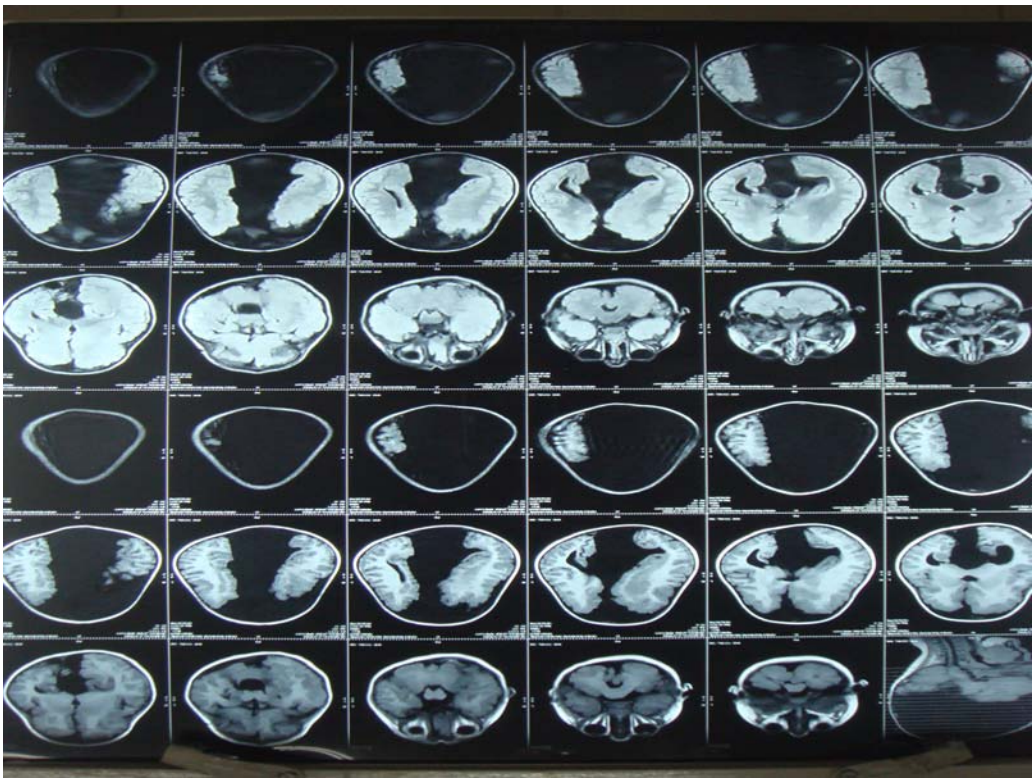

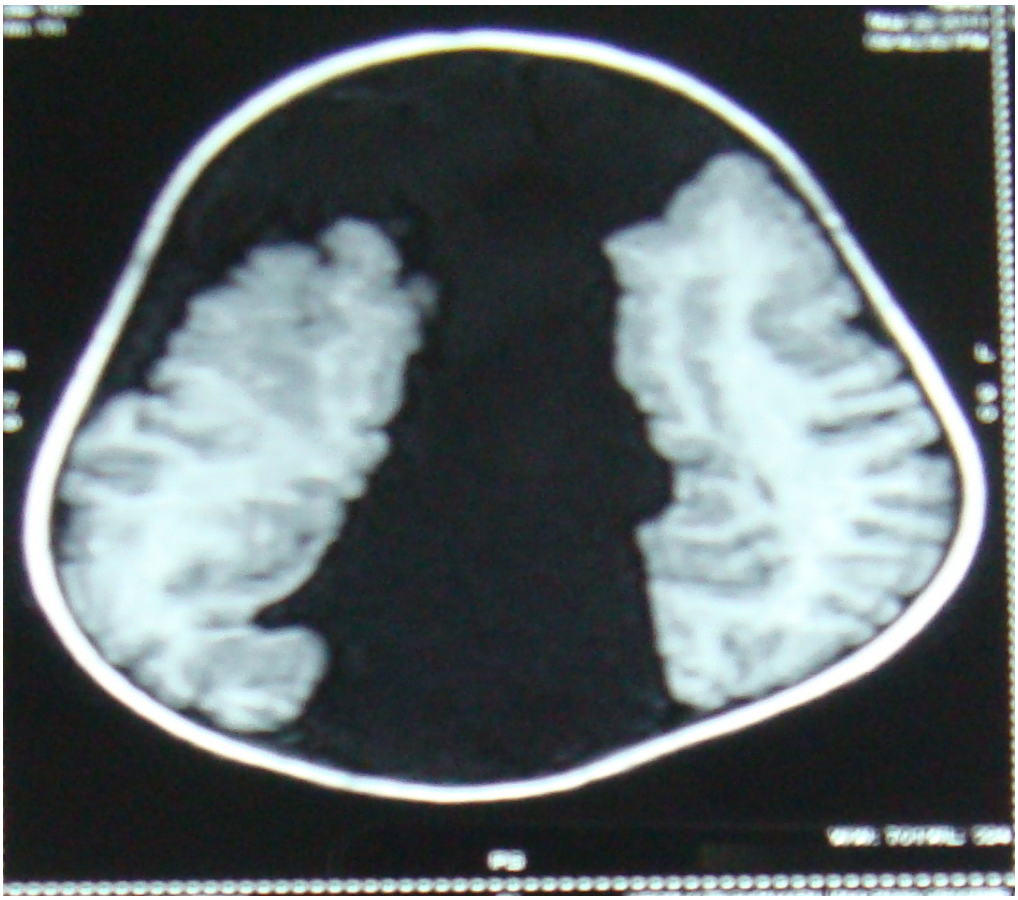

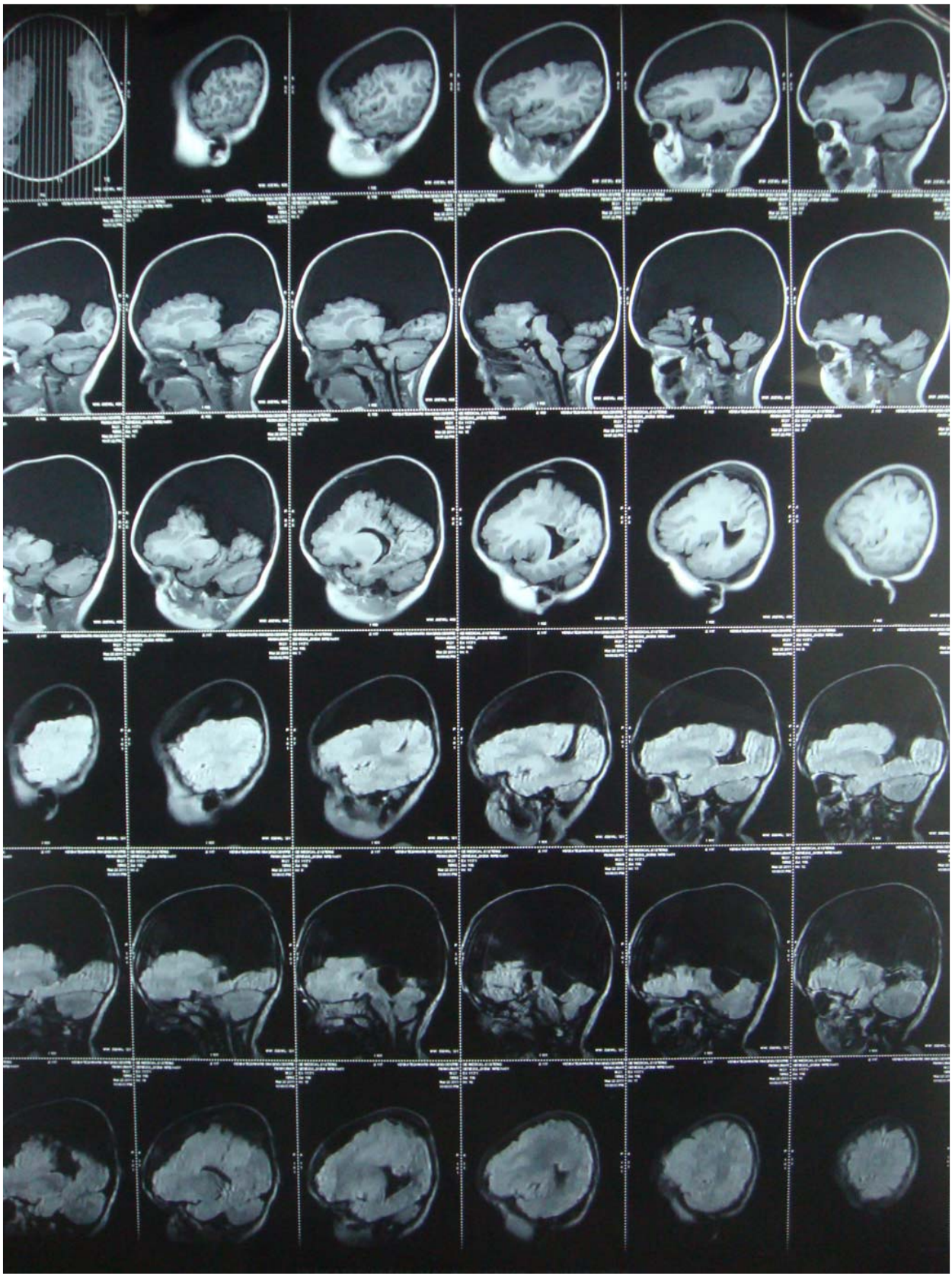

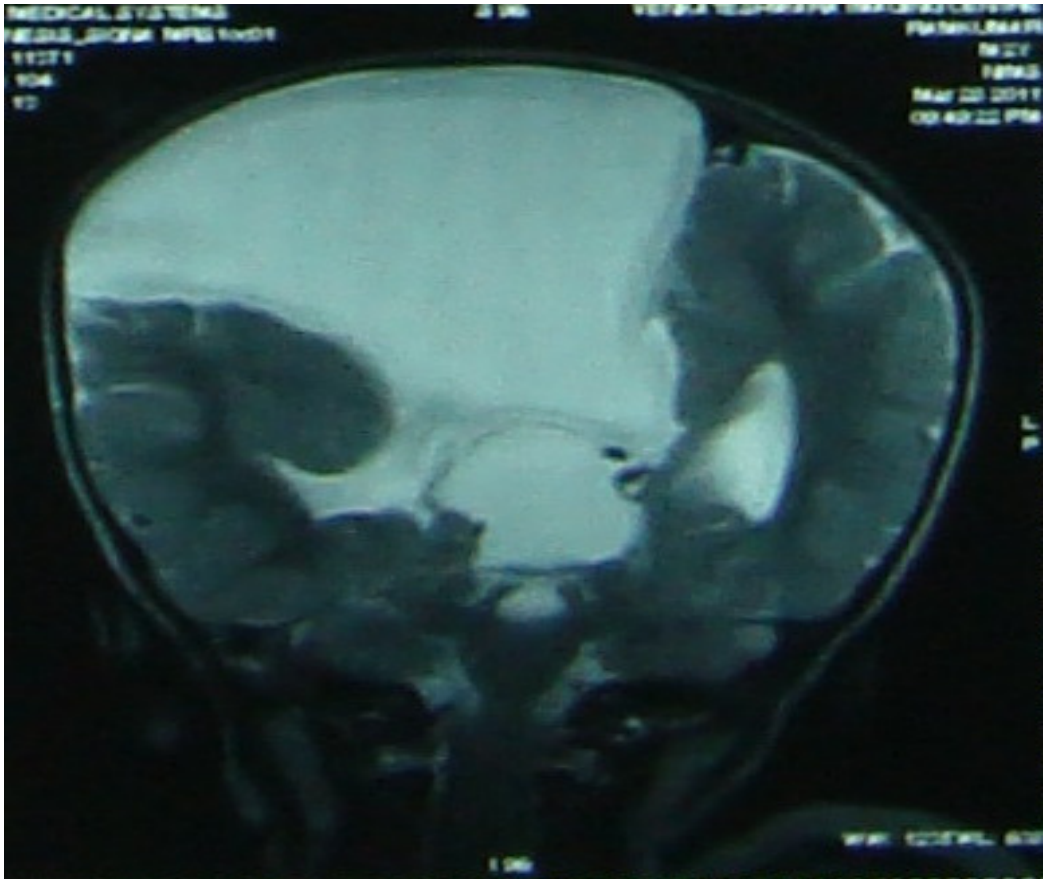

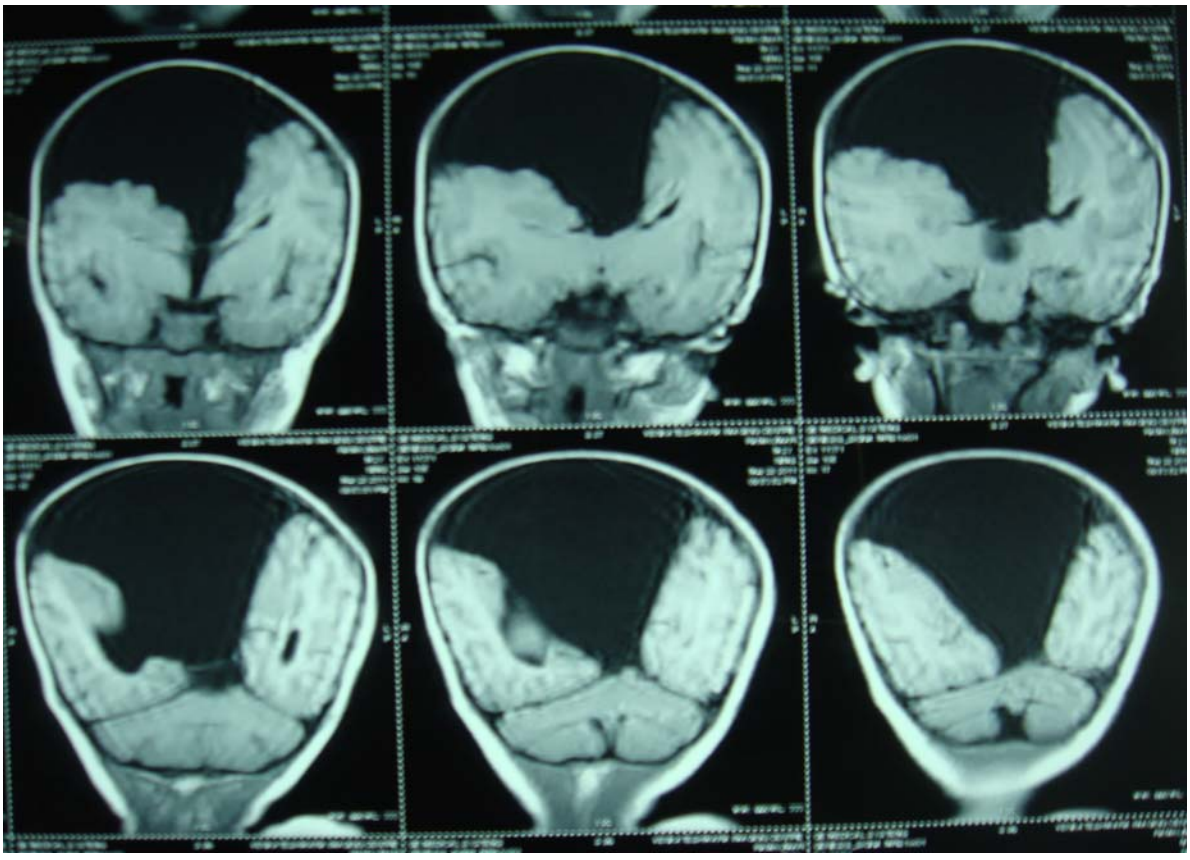

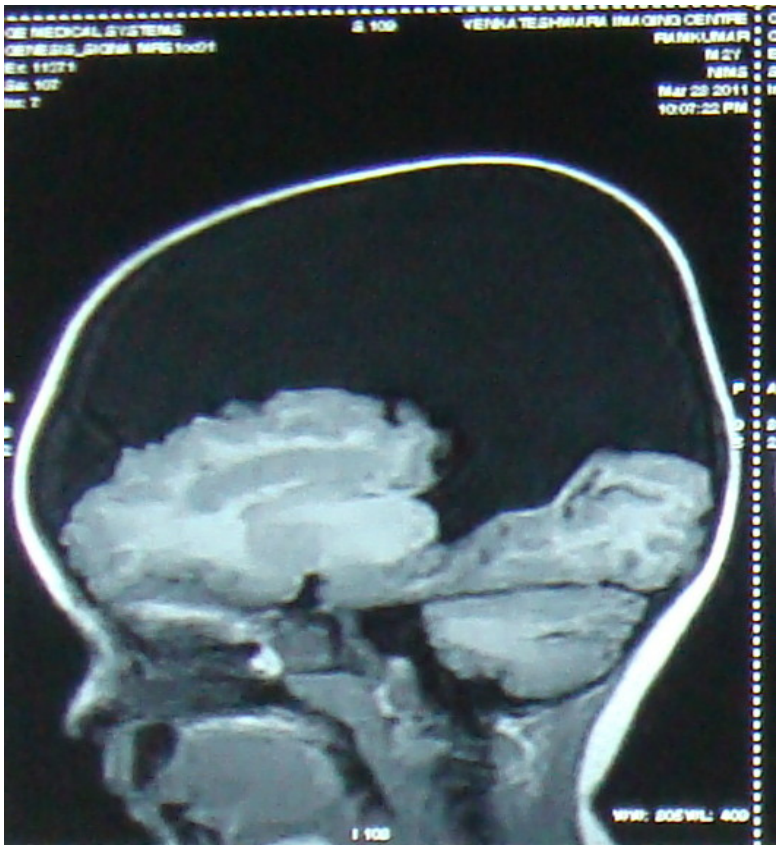

aspirations and placement of cystoperitoneal shunts(4).Given its minimal invasiveness endoscopic fenestration has gained wide acceptance in the recent past(6,7,8). None of the surgical techniques described has proven superiority over others. Conservative management can be considered irrespective of the size in cysts with no change in size or raised ICP.

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