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**Educational Abstract**

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**Intracerebral Aspergillosis In Immunocompromised child : Radiographic findings**

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Learning objective : To study the MRI appearance of cerebral aspergillosis. Intracranial aspergillosis is a rare entity, which is difficult to diagnose and may be rapidly fatal when left untreated. It may present as multiple infarcts or cerebral abscesses.

Background: 8 year old male child with B cell ALL on chemotherapy, with ANC 120/uL presented with fever and altered sensorium. On examination, there was power in right lower limb was 3/5. No signs of meningeal irritation were noted.

Procedure and imaging findings : MRI brain was done on 1.5T siemens scanner, using standard brain sequences. On T1w images, a hypointense lesion with a hyperintense rim which showed lobulated peripheral enhancement on gadolinium injection, in left centrum semiovale. On T2w images, the lesion had high signal intensity centrally and hypointense rim. A perilesional area of hypointensity on T1w and hyperintensity on T2w and FLAIR images was noted, finding consistent with vasogenic edema. It also showed few areas of blooming on GRE sequence. Diffusion restriction was noted within and around the lesion. Rest of the structures imaged appeared normal.

CSF galactomannan assay was positive (1.26, normal <0.5). CSF cryptococcal antigen test, staining by giemsa, India ink, culture was negative.

On basis of imaging and clinicomicrobiological findings, a provisional diagnosis of cerebral aspergillosis was made. Voriconazole was added to treatment regimen and patient showed favourable clinical response.

Conclusion : Intracerebral aspergillosis, while a rare entity overall, should be suspected in all cases of immunocompromised patients with suggestive clinical and imaging features.