A 14-year-old female born out of nonconsanguineous marriage with insignificant birth history presented with complaints of weakness of right upper and lower limbs with poorly controlled seizures. Examination revealed right-sided spastic hemiparesis with brisk tendon reflexes and extensor plantar response. CT brain was done for the patient.

**Imaging Findings:**

CT Brain study shows volume loss of left cerebral hemisphere with gyral atrophy and thick cortical & gyral calcifications seen involving the left parietal parietotemporal and temporal regions with relatively prominent temporal horn of the left lateral ventricle. Prominent cortical sulci and basal cisterns were seen in left cerebral hemisphere. Ipsilateral calvarial thickening noted. Also, hyperpneumatisation of the left frontal, sphenoidal and mastoid air cells was seen.

**Discussion:**
Dyke Davidoff Masson syndrome (DDMS) is a condition diagnosed usually in pediatric patients who presented with clinical features of hemiparesis, recurrent seizures, mental retardation. The clinical features include contralateral hemiparesis with upper motor neuron type of facial palsy, focal or generalized seizures and mental retardation with learning disabilities. There is no sex predilection and any side of the brain can be involved, though involvement of the left side and male gender have been shown to be more common. The radiological features include cerebral hemiatrophy with ipsilateral dilatation of ventricle with a midline shift and widening of sulci and sylvian fissure on same side and ipsilateral compensatory hypertrophy of paranasal sinuses and calvarial thickening of the skull. However, unilateral focal atrophy may occasionally be seen in the cerebral peduncles, thalamic, pontine, crossed cerebellar and parahippocampal regions.[1] Elevated temporal bone can also be seen in some cases. Elevation of the greater wing of sphenoid and petrous ridge also elicited[3] The osseous abnormalities can be depicted on plain skull films. These radiological features will be more evident with time as the patient gets older[4]. Cerebral atrophy can be congenital or acquired type. The pathogenesis behind congenital subtype which is symptomatic in infancy is due to fetal and neonatal vascular occlusion. In the acquired subtype that presents in childhood the etiological factors include perinatal hypoxia, intracranial haemorrhage, infections, cranial trauma, and cerebrovascular lesion. DDMS can be easily undiagnosed during acute phase in the first days of life as the vast majority is due to characteristic idiopathic middle cerebral artery territory stroke. So detailed history and examination are needed with imaging modalities for the diagnosis. In DDMS presenting in early childhood, refractory seizures remain the usual concern. In such cases hemispherectomy is the treatment of choice with a success rate of 85%. However, if the presentation is late and seizures are under control, the patient can be kept on antiepileptic medications in spite of surgery, along with supportive therapy like physiotherapy, speech therapy, and occupational therapy[1].

**Differential Diagnosis List:** Dyke-Davidoff-Masson syndrome, Sturge-Weber syndrome, Rasmussen encephalitis, Hemimegalencephaly, Silver-Russell syndrome, Fishman syndrome

**Final Diagnosis:** Dyke-Davidoff-Masson syndrome

**References:**

Description: Axial CT Brain showing volume loss of left cerebral hemisphere with gyral atrophy, gyral and cortical calcifications involving left parietal region. Origin: Department of Radiodiagnosis, GSL Medical College and General Hospital, Rajahmundry, Andhra Pradesh, India.
Figure 2

**Description:** Axial CT Brain showing volume loss of left cerebral hemisphere with gyral atrophy, gyral and cortical calcifications seen involving left parieto temporal regions with relatively prominent temporal horn of left lateral ventricle. Hyperpneumatised left frontal sinus also seen.

**Origin:** Department of Radiodiagnosis, GSL Medical College and General Hospital, Rajahmundry, Andhra Pradesh, India.
Description: Axial CT Brain showing prominent cortical sulci in left cerebral hemisphere. Calvarial thickening also noted Origin: Department of Radiodiagnosis, GSL Medical College and General Hospital, Rajahmundry, Andhra Pradesh, India.
**Figure 4**

*Description:* Axial CT Brain showing hyper pneumatization of left sphenoid sinus and left mastoid air cells

*Origin:* Department of Radiodiagnosis, GSL Medical College and General Hospital, Rajahmundry, Andhra Pradesh, India.