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ASYMPTOMATIC UNILATERAL CEREBELLAR HYPOPLASIA IN AN ADULT PATIENT - A UNIQUE PRESENTATION.

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ABSTRACT

Unilateral cerebellar hypoplasia is a relatively rare malformation. We report a case of 54 year old female patient who presented with single episode of sudden unconsciousness and slurring of speech. Imaging finding suggests the diagnosis of unilateral cerebellar hypoplasia. The patient recovered with conservative management probably because the symptoms were due to Transient ischemic attack not due to hypoplasia.

INTRODUCTION

This is a relatively rare malformation. In literature, the case reports available regarding unilateral cerebellar hypoplasia are mostly of pediatric age group. We report an unusual case of unilateral cerebellar hypoplasia that was detected in an adult previously asymptomatic patient following TIA.

REPORT

54 year old female patient was admitted in ER with complaints of slurring of speech and an episode of sudden loss of consciousness. On examination she had a B.P of 180/120 mmHg. No other significant finding was seen during examination. Her past history was also unremarkable. She never had cerebellar signs like ataxia or any psychomotor abnormality. MRI brain was done to rule out stroke. MRI showed asymmetry of cerebellar hemispheres, left cerebellum appeared hypoplastic. There was mild asymmetry of vermis and brain stem (mid brain and pons). Few ischemic infarctions were seen in bilateral fronto parietal and parietal periventricular region. Based on these findings diagnosis of Unilateral cerebellar hypoplasia was made. The patient was managed conservatively for TIA and recovered.

The Unilateral cerebellar hypoplasia is rare disorder characterized by the loss of volume in cerebellar hemispheres ranging from mild asymptomatic to severe symptomatic cases¹ Cerebellar hypoplasia is frequently diagnosed by second trimester prenatal sonology².

It is frequently associated with psychomotor disorders than with cerebellar symptomology³.

The etiology of cerebellar hypoplasia is not definitely known. Pathologic evidence of cerebellar injury due to birth asphyxia has been described. Cerebellar hypoplasia associated with hypoplasia or aplasia of the cerebellar or vertebral arteries suggests a vascular etiology. Genetic mutations may also have a role. Patients with diffuse hypoplasia generally have normal cerebral⁴.

It is observed that mild asymmetry in the size of the cerebellar hemispheres is occasionally seen as an incidental finding without clinical significance. Also involvement of the cerebellar vermis is associated with poor cognitive outcome whereas intact vermis is associated with normal cognitive outcome and truncal ataxia⁵.

On the basis of MRI findings cerebellar malformations can be divided into those associated with hypoplasia and those with dysplasia. Malformation can either be focal or diffuse⁶.

Also in our case Unilateral cerebellar hypoplasia was found in a patient with no previous evidence of neuromuscular or metabolic disease and no past history of trauma or anoxia. In present case the patient symptoms were due to TIA which responded to anti hypertensive treatment. The unilateral cerebellar hypoplasia was an incidental finding.

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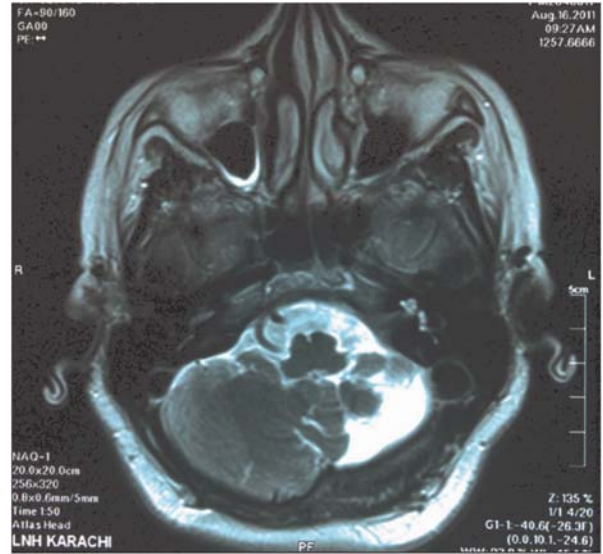


Figure 2: Brain MRI.

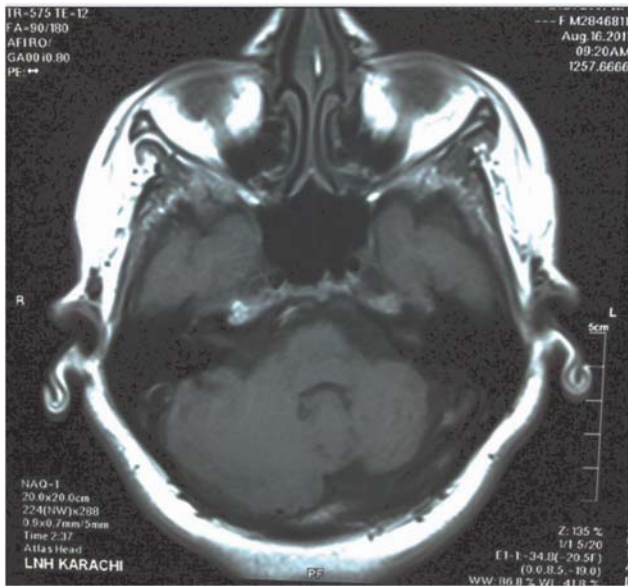


Figure 1: Brain MRI.

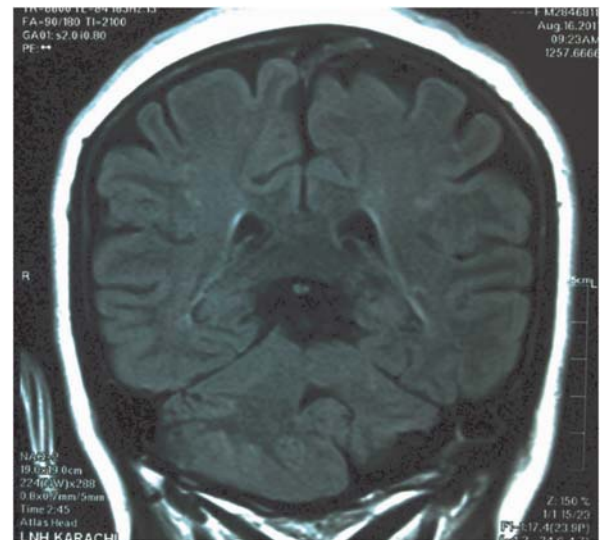


Figure 3: Brain MRI.