



A CASE OF CEREBRAL DIPLEGIA DUE TO BILATERAL CEREBRAL ARTERY THROMBOSIS

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ABSTRACT Simultaneous bilateral cerebrovascular infarction is relatively rare and its initial presentation as a space-occupying lesion is extremely uncommon. Here is a case of bilateral anterior cerebral artery thrombosis causing cerebral diplegia, which is very rare to occur. We report the case of a woman presenting with b/l lower limb weakness and aphasia of acute onset. . MRI brain showed b/l anterior cerebral artery territory infarction. MRA B/L anterior cerebral artery thrombus with absent flow..

KEYWORDS :

CASE REPORT:

A 68 year old female patient was brought by her son with complaints of not talking and not able to move her both legs. They noticed her like that when they returned from work. patient was in altered sensorium, no wasting, hypertonia in lower limbs and upper limbs. As the patient is in altered sensorium power could not be checked. She was absolutely not moving both legs. Reflexes :all deep tendon reflexes are exaggerated. Plantar:b/l extensor, abdominals :absent. CT was done immediately and was found b/l infarcts in anterior cerebral artery territory. Investigations -Hemogram and blood biochemistry were normal. Serology HIV, HBsAg, HCV were non reactive. Coagulation profile. Chest X-ray and 2D Echo were normal. MRI brain(Figure :1) showed b/l anterior cerebral artery territory infarction.MRA (FIGURE: 2): B/L anterior cerebral artery thrombus with absent flow.MRV was normal.

Patient was started on IV Mannitol and aspirin 150 mg and atorvastatin 40 mg. There was no improvement in patient further. Patient was discharged at attenders request.She has not come for follow-up later.

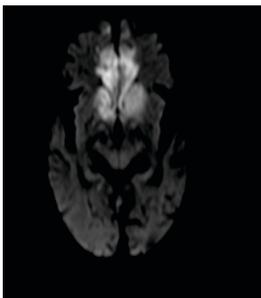


Figure 1:mri Brain Dwi Shwoing B/L Anterior cerebral Infarction



Figure 2:mra :no Flow In Bilateral Anterior Cerebral

DISCUSSION:

The ACA is a major vessel responsible for the blood supply to the inter hemispheric region. Infarction of the ACA territory accounts for only 0.3% to 4.4% of cerebral infarctions reported [1,2]. Bilateral ACA infarction is even rarer. Twenty-seven cases of ACA territory infarction were reported among 1490 cases of cerebral infarction in the Lausanne Stroke Registry; however, there were only two cases of bilateral ACA territory infarction [3].

According to Bogousslavsky and Regli, 63% of ACA infarctions result from cardiogenic emboli or artery-to-artery emboli [3]. Gacs et al. reported other causes: unilateral occlusion of the internal carotid artery (ICA), distal extensions of ICA thrombosis and local thrombus caused by vasculitis [2]. Bilateral ACA territory infarction is usually due to vasospasm that occurs as a complication of subarachnoid haemorrhage caused by the rupture of one or more aneurysms of the anterior communicating arteries or distal ACAs [1]. However, in the case of an anomaly in the anterior part of the circle of Willis, thrombosis or embolism can lead to bilateral infarction.

Anomalies of the ACA are not quite as rare as was previously believed [4,5]. Baptista demonstrated anomalies of the ACA in 25% of the brain specimens studied [4]. Considerable variations occur in the origin and course of the ACA [5]. However, three distinct patterns are well recognised: accessory ACA, bihemispheric ACA and unpaired or azygous ACA [5]. The true incidence of bilateral ACA infarction is unknown, with few cases reported in the literature. In 2004, Yamaguchi et al. reported a similar case with a patient presenting with lower limb weakness and magnetic resonance angiography demonstrating bilateral anaplastic ACAs [6].

Occlusion of stem of the anterior cerebral artery proximal to anterior communicating artery is well tolerated. When occlusion is distal to communicating artery symptoms are seen. Usual causes are thrombosis of proximal part of one anterior cerebral artery when other anterior cerebral artery is rudimentary . In this case there was no flow in bilateral anterior cerebral arteries due to two thrombi obstructing both anterior cerebral arteries as per m.r angiogram.

CONCLUSION:

Acute paraplegia is a common scenario we face in clinical practice. Generally we think of spinal causes for paraplegia evaluation. This case makes a note that central causes too should be considered. Superior sagittal sinus thrombosis is another etiology with similar presentation.Bilateral anterior cerebral artery infarction is rare.It is usually due to thrombosis of unpaired anterior cerebral artery.But

bilateral cerebral artery thrombosis is very to occur.

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