



## A Case of Lateral Medullary Syndrome - Opalski Variant

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### Abstract

*Lateral Medullary Syndrome is a clinical syndrome results from a vascular event in lateral part of the medulla oblongata. Opalski syndrome is a rare variant of lateral medullary syndrome is associated with ipsilateral hemiparesis. In this case report we present a patient who presented with Opalski variant of lateral medullary syndrome.*

**Keywords:** *Lateral Medullary Syndrome , Opalski Syndrome.*

### Introduction

Lateral Medullary Syndrome (LMS) is also called Wallenberg syndrome or posterior inferior cerebellar syndrome. The arteries commonly involved are posterior inferior cerebellar artery or the vertebral artery. The structures involved are inferior cerebellar peduncle, dorsolateral medulla, descending spinal tract, fibres of the vagus and glossopharyngeal, descending sympathetic tract, vestibular nuclei and spinothalamic tract<sup>1</sup>. Usually corticospinal tract is not involved in lateral medullary syndrome. Opalski syndrome is a rare variant of LMS, where corticospinal tract involvement is seen<sup>2</sup>.

### Case Report

A 62 year male came with complaints of weakness of left upper and lower limb, decreased sensation over right upper limb and lower limb and left side of face, difficulty in swallowing, slurring of speech, deviation of angle of mouth to left side,

belching, hiccups since 15 days. General examination and his vital signs were unremarkable. On neurological examination his higher mental functions were normal. Cranial nerve examination showed deviation of angle of mouth to left side, loss of nasolabial fold on right side wrinkling of forehead present on both sides, drooling of saliva present, position of uvula is deviated to left side, gag reflex diminished, palatal arch decreased movement on left side, dysarthria present, tongue deviated to left side. Motor examination revealed power of 4/5 with exaggerated deep tendon reflexes on left upper and lower limb, plantar extensor on left side. Sensory system examination revealed decreased pain and temperature sensation over left side of face, right upper and lower limb and right side of trunk.

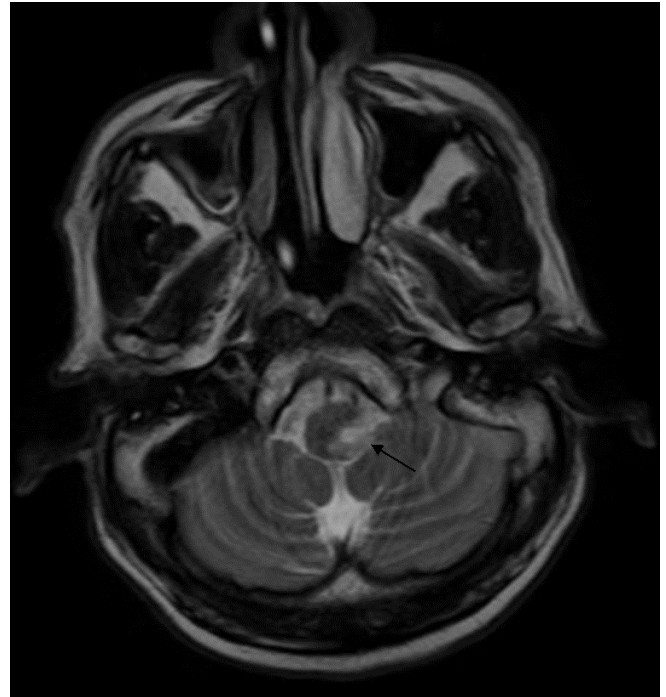


Routine blood investigation showed hyponatremia (serum sodium-122mEq/L), blood sugar, lipid profile, thyroid profile, renal function, HIV, syphilis test, chest x ray, ECG and Echocardiogram were normal.

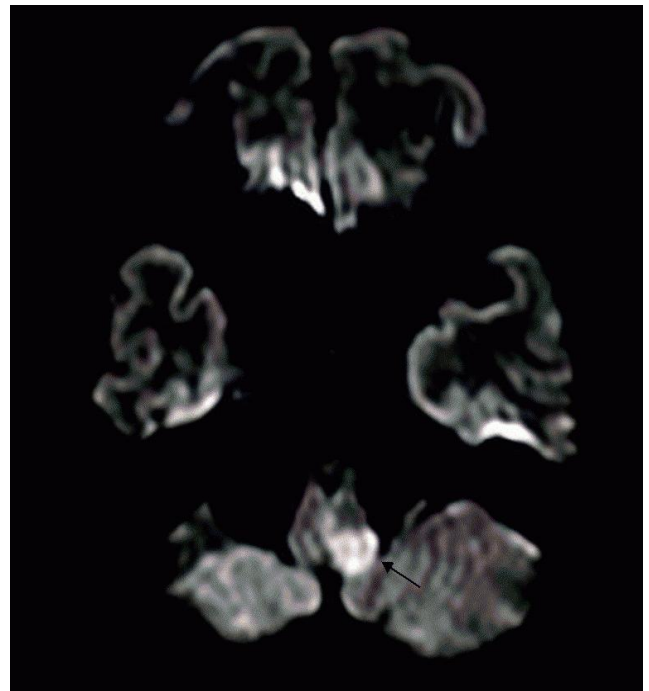
MRI brain T1 Weighted showed hyperintense lesion in left posterolateral medulla suggestive of infarct.



MRI Brain T2 Weighted image showing hyperintense lesion in leftposterolateral medulla suggestive of acute infarct.



Diffusion weighted MRI showing focal area of diffusion restriction in posterolateral medulla on left side suggestive of acute infarct.



**Discussion**

Lateral Medullary Syndrome is rare type of posterior circulation stroke. Clinical presentations are loss of pain and temperature over ipsilateral face and contralateral trunk and limbs, vertigo,

nystagmus, dysphagia, ipsilateral cerebellar signs and Horner's syndrome.

There are five patterns of sensory impairment that have been described by Zhang et al. This patient comes under type 1 sensory involvement that is involvement of ipsilateral face and contralateral trunk and limbs<sup>3</sup>.

Along with lower cranial nerve palsy, this patient had an additional feature of Opalski's syndrome that is ipsilateral hemiparesis with a positive Babinski sign. Hemiparesis in LMS is due to caudal extension of the infarct to involve corticospinal tracts after the decussation. Recent studies showed involvement of medullary penetrating arteries, a branch of the vertebral artery which supplies pyramidal fibres post-decussation may be responsible<sup>4,5</sup>.

### References

1. RL Sacco, L Freddo, JA Bello, et al. Wallenberg's lateral medullary syndrome. Clinical-magnetic resonance imaging correlations. *Arch Neurol.* 1993;50(6): 609–14.
2. Opalski A. A new sub-bulbar syndrome: Partial syndrome of the posterior vertebral artery. *Paris Med.* 1946:214–20.
3. SQ Zhang, MY Liu, B Wan, HM Zheng. Contralateral body half hypalgesia in a patient with lateral medullary infarction: atypical Wallenberg syndrome. *Eur Neurol.* 2008;59(3-4):211–15.
4. S Pandey, A Batla. Opalski's syndrome: A rare variant of lateral medullary syndrome. *J Neurosci Rural Pract.* 2013;4(1):102–04.
5. DM Hermann, HH Jung, CL Bassetti. Lateral medullary infarct with alternating and dissociated sensorimotor deficits: Opalski's syndrome revisited. *Eur J Neurol.* 2009;16(9):e72–4.