CASE OF HYPERTENSION PRESENTING AS THALAMIC SYNDROME

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ABSTRACT: A 42 year old male a chronic smoker with history of hypertension presented with weakness of the left upper and lower limb with left sided sensory impairment manifesting as hyperpathia and allodynia. The patient was further evaluated and a diagnosis of thalamic syndrome was made.

INTRODUCTION: Thalamic syndrome or Dejerine Roussy syndrome is a condition associated with inadequate blood supply from the posterior cerebral artery. _{2.} It is characterized by a thalamic lesion, slight hemiplegia, disturbance of superficial and deep sensibility, hemiataxia and hemiastereognosia, intolerable pain and choreoathetoid movements.¹

CASE REPORT: A 42 year old male patient, chronic smoker presented with left sided hemiparesis since 3 months. The patient was a known hypertensive on treatment. His blood pressure was 150/90 mm Hg. General physical examination revealed that patient was right hand dominant, oriented to time place and person and had altered facial expressions. Neurological examination revealed that cranial nerves were intact, no memory deficits, optic fundus examination showed no changes. Motor system examination revealed left upper limb strength of 2/5 with spasticity and left lower limb strength of 3/5 with spasticity. Deep tendon reflexes showed left sided hyperreflexia while the right side was normal. Sensory examination revealed severe burning type of pain in response to non noxious stimuli in the form of light touch test.

Patient was further investigated and his investigations revealed.

Hb 12.6gm%, TLC of 9000 cells/cumm, platelet count 180000cells/cumm, RBS 98mg/dl, blood urea 31mg%, serum creatinine 1.1mg/dl. BT AND CT 1'45" and 4'50" respectively, urine routine normal, fasting lipid profile within normal limits, liver function tests were normal and HbsAg and HIV were negative.

ECG and 2D-Echocardiogram were normal.

MRI BRAIN showed hematoma in right thalamus and with no mass effect. The patient was started an Dothepin Hydrochloride 75 mg once daily, with Amitriptyline 25mg once a day Nifedipine 10mg twice daily, Rosuvastatin 10mg at night and Injectable Mecobalamin 500 microgram once daily. With these details a diagnosis of Thalamic Syndrome was made.

CASE REPORT



MRI-BRAIN SHOWING HEMATOMA IN RT. THALAMUS Fig 01

DISCUSSION: Dejernine Roussy syndrome was originally described by Dejerine and Roussy in 1906 and attributed to infarction of the thalamus. The thalamus has been described as the sensory relay station of the brain. Pain or discomfort may be felt on the affected side after being mildly touched or even in absence of stimuli, the pain may aggravate by exposure to heat or cold and by emotional distress, various sensory abnormalities are commonly found in these patients including disturbance of temperature discrimination.²

However, thalamic syndrome or Dejerine roussy syndrome is an obsolete term and now known as central pain syndrome whose subdivisions are central post stroke pain, central post stroke syndrome. Researchers now know that damage to other areas of brain can cause central pain syndrome.³

Post stroke pain or thalamic pain is a burning, severe and paroxysmal pain exacerbated by touch and other stimuli, usually occurs after weeks or months after stroke.⁴

Hyperpathia is an abnormally painful and exaggerated reaction to painful stimuli while Allodynia is an abnormal perception of pain from a normally non-painful mechanical or thermal stimulus.⁵



Clinical features of central pain syndrome include muscle pains, dysesthesias, hyperpathia, allodynia, shooting/lancinating pain, circulatory pain, peristaltic/visceral pain.

DIAGNOSTIC CRITERIA FOR CENTRAL POST STOKE PAIN 7.

Mandatory criteria for the diagnosis of CPSP:

- Pain within an area of the body corresponding to the lesion of the CNS
- History suggestive of a stroke and onset of pain at or after stroke onset
- Confirmation of a CNS Lesion by imaging or negative or positive sensory signs confined to the area of the body corresponding to the lesion
- Other causes of pain, such as nociceptive or peripheral

Supportive criteria:

- No primary relation to movement, inflammation, or other local issue damage.
- Descriptions such as burning, painful cold, electric shocks, aching, pressing, stinging, and pins and needles, although all pain descriptors can apply.
- Allodynia or dysaesthesia to touch or cold.

MODALITIES OF TREATMENT: Pain medications usually provide no relief in cases of central pain syndrome; however lamotrigine and amitriptyline proved beneficial with central pain of brain origin. Some use gabapentin and pregabalin but they are not recommended by the Scottish medicinal agency. Antiarrhythmic mexiletine and lidocaine is also effective.

INVESTIGATIONAL THERAPIES

- 1. Extradural cortical stimulation of sensory motor area.
- 2. Intrathecal administration of drugs such as baclofen and midazolam
- 3. Thalamotomy
- 4. Subparietal leucotomy or capsulotomy
- 5. Vestibular caloric stimulation done on 9 patients showed a reduction of pain by 2.58 on a scale of 10 against 0.54 in the placebo group.

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