



## A Rare Case of Central Pontine Myelinolysis

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### CLINICAL HISTORY

A 70 years old woman presented to emergency department with generalized weakness and altered speech since 2 weeks followed by altered sensorium. There was history of loss of consciousness and fall at home. She is not an alcoholic on clinical examination, confusion, horizontal gaze paralysis, and spastic quadriplegia were noted with increased limb tone, limb weakness and hyperactive, reflexes.

Non alcoholic and no history of any organ transplant.

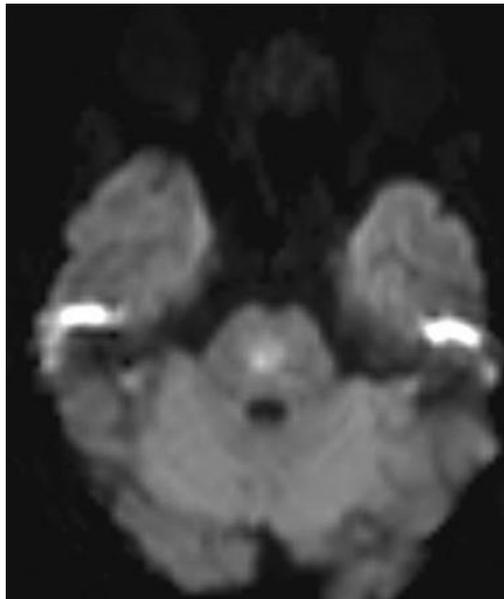
The serum electrolyte analysis revealed hypokalaemia (2 meq/l) and hyponatraemia (10 meq /l). Computed tomography (ct) scan of the brain was normal. Electrolyte imbalance was being corrected using potassium chloride in dextrose saline and 3% normal saline. There was mild improvement of her condition. Two days later she was presented again with confusion and altered levels of consciousness. The patient was then sent for magnetic resonance imaging (MRI) examination of the brain.

MRI was done using a 1.5 T magnet.

**FINDINGS**

**There is evidence of ill-defined confluent T2/ flair hyperintense signal and restriction on DWI noted at the central pons – Central pontine myelinolysis.**

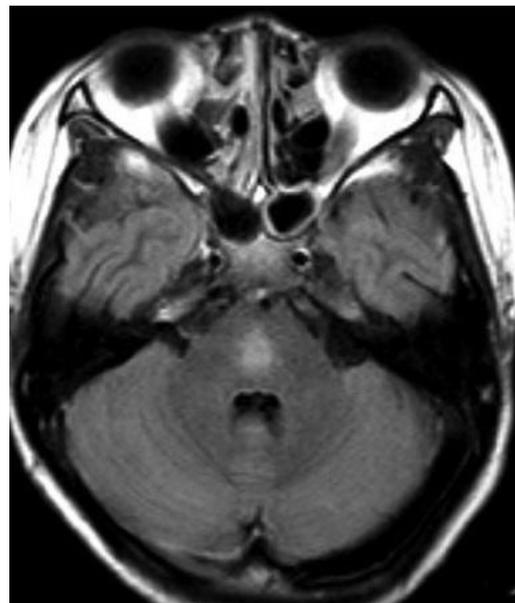
Visualized intra cranial segments of the internal carotid arteries, anterior cerebral, visualized arteries, basilar artery under view & both posterior cerebral arteries appear normal.



A) DWI showing restriction within central pons



B.



C.

B & C) T2 wighted and FLAIR images showing hyperintense signal in central pons.

## DISCUSSION

The earliest change is seen on DWI with restriction in the lower pons. This is seen within 24 hours of the onset of quadriplegia.

Demonstrates eventual high T2 signal and later low T1 signal. The T1 and T2 changes may take up to two weeks to develop. This region has a classic trident shaped appearance.

Differential diagnosis includes demyelination, infarction from basilar perforators can be central, although usually brainstem infarcts stop at the midline and pontine neoplasms.

## REFERENCES

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