what's your diagnosis?

A 40-year old obese female with altered sensorium

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Ann Saudi Med 2007; (27)4: 301

40-year old obese female was admitted with altered sensorium, a history of vomiting and documented hyponatremia followed by fluctuating encephalopathy and a deep coma state. She was initially managed at a peripheral health center where her serum sodium was 98 mEq/L. She was treated for severe hyponatremia (duration of hyponatremia and rate of correction not known) with a slight improvement noticed by her family members initially. The patient was managed inititally at a primary health center by a primary care physician with slight improvement but soon developed fluctuating encephalopathy and was shifted to our medical center. On admission, the patient was still in a stuperous state with spontaneous guttural vocalization only and no active movement of her limbs. On examination, the patient had asymmetrical extrapyramidal signs-more on the right side compared to the left. The patient had normal pupillary reflexes and

maintained ocular movements. Spastic paralysis of all four limbs was associated with brisk deep tendon reflexes, hypertonia and the Babinski sign (the patient was in a locked-in like state with maintained ocular movements, normal pupillary reaction, brisk deep tendon reflexes and flexor responses to planters). The rest of the systemic examination was normal.

Routine tests were normal except for serum sodium of 115 mEq/L and serum potassium of 1.98 mEq/L. The patient underwent magnetic resonance imaging (MRI) of the brain (Figure 1a).

1. What are the findings on the MRI scan of the brain?

2. What is the likely diagnosis in this clinical setting?

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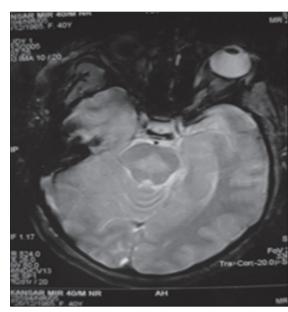


Figure 1a. A tridentshaped area of T2 hyperintensity (arrow) in the central pontine region in the axial plane on cranial MRI scan.