

POSTPARTUM HYPERCALCEMIC SEIZURE MIMICKING ECLAMPSIA IN A YOUNG HYPERTENSIVE MOTHER

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Case presentation

28-year-old primigravida with young hypertension was admitted for induction of labour at 37 weeks of gestation. She had young hypertension for three years and was on Diltiazem and methyldopa throughout the pregnancy. Though the possible reason for young hypertension has not been identified, her pregnancy had been otherwise uneventful till 37 weeks where she developed proteinuria. She did not show other clinical or haematological manifestations of pre eclampsia.

New onset pre-eclampsia and failed induction lead to caesarean delivery under MgSO₄ cover for seizure prophylaxis.

Postpartum seventh day she developed generalised seizures which could only be controlled after commencing MgSO₄, Diazepam, Levetiracetam, phenytoin infusions and finally paralysing and ventilating the patient. Investigations revealed hypercalcaemic seizure due to primary hyperparathyroidism. Medical management of hypercalcemia provided dramatic response. 4D CT scan of the parathyroid glands revealed left parathyroid adenoma measuring 11mm×10mm×7mm. Parathyroid adenectomy provided complete cure to primary hyperparathyroidism and its complications.

Objectives

Primary hyperparathyroidism is the third most common endocrine disorder after diabetes and thyroid disease, rarely affecting women of childbearing age. It is a rare cause for young hypertension.

Seizure developing on the seventh postpartum day in a hypertensive woman may mimic eclampsia unless proven otherwise.

Hypocalcaemia is well known aetiology for seizures.

Hypercalcaemia rarely can lead to seizures through hypercalcaemia-induced hypertensive encephalopathy and vasoconstriction

We report a rare case of hypercalcaemic seizures in primary hyper parathyroid woman on seventh postpartum day mimicking eclampsia

Figure 1
Macroscopic appearance

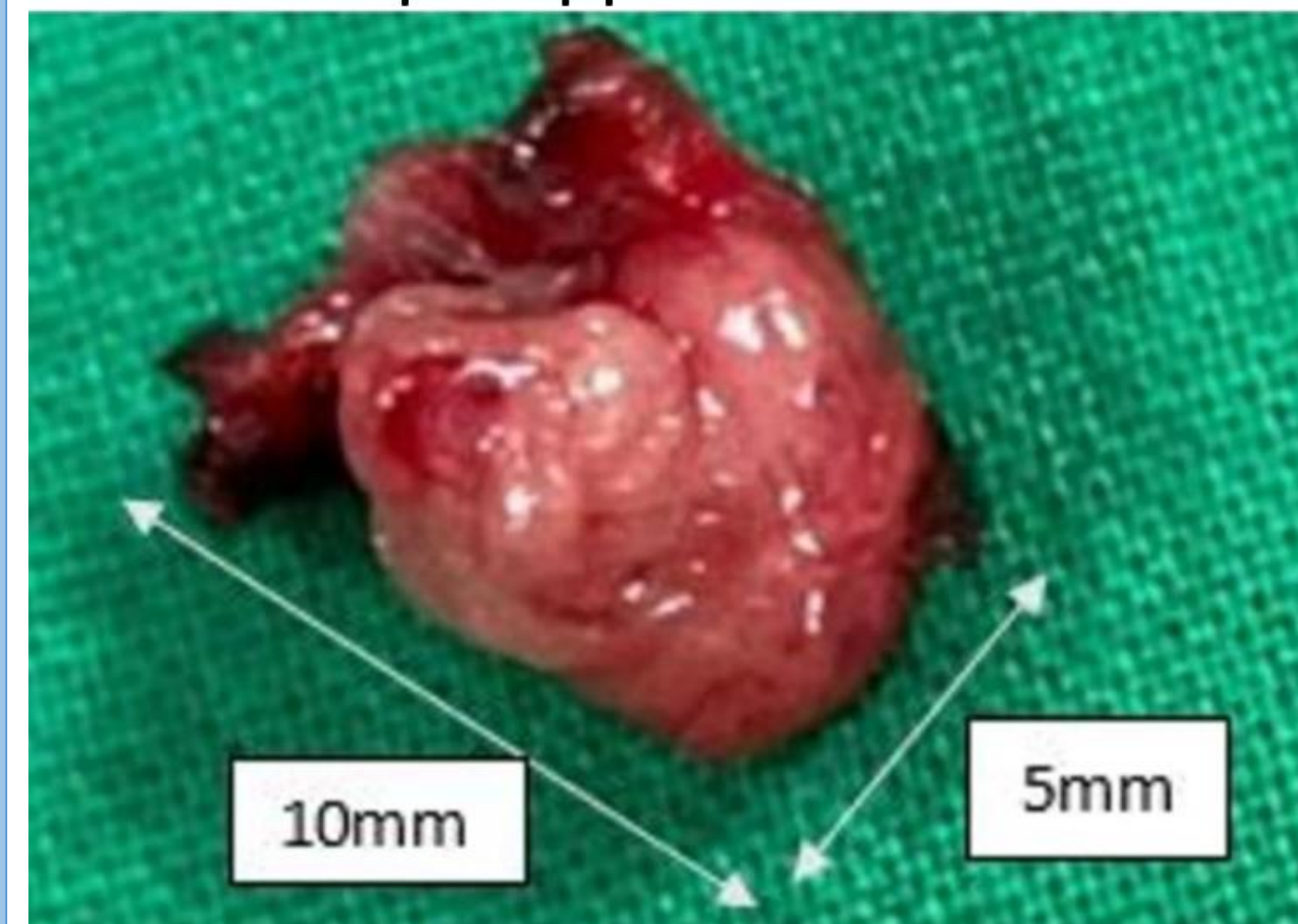


Figure 2 4D CT image
adenoma marked with yellow circle



Discussion

It would be customary to manage generalised tonic clonic seizures as eclampsia in immediate post partum period. Though the late presentation and unresponsiveness to initial treatment prompted us to look for rare causes in this patient. Diagnosis of hyperparathyroidism is difficult during pregnancy as hypercalcaemia is masked by the increased demand for calcium during pregnancy.

There is increased risk of acute pancreatitis and seizures secondary to hypercalcaemia during postpartum period with abrupt cessation of maternal transfer of calcium to the foetus.

Technetium-99^m Sestamibi scan is considered as the gold standard for imaging to detect parathyroid tumours. Modern multiphase 4D CT techniques report a sensitivity and specificity exceeding 90% and can be used

Ideal treatment for primary hyperparathyroidism (parathyroid adenoma) is surgery which can be safely performed even during pregnancy.

Conclusion

Postpartum women with seizures mimicking eclampsia but sub optimally responding to conventional treatment need to be evaluated for other possible aetiologies .