

TITLE :A CASE OF HYPERCALCEMIA PRESENTING WITH PSYCHIATRIC MANIFESTATIONS

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Introduction: Hypercalcemia is an infrequent yet potentially life-threatening complication associated with parathyroid adenomas and various malignancies, including PTHrP-secreting carcinomas of the lung and breast, as well as lytic metastatic lesions. Typically, hypercalcemia manifests with classic symptoms such as renal dysfunction (stones), bone pain (bones), and gastrointestinal disturbances (moans). However, psychiatric manifestations are less frequently reported. This case report elucidates a unique presentation of hypercalcemia in a patient who exhibited solely psychiatric symptoms, underscoring the necessity for heightened clinical vigilance and comprehensive diagnostic evaluation.

Report of the case :An elderly male farmer from rural Telangana presented with a 15-day history of altered mentation, characterized by irrelevant speech, talking to himself, holding imaginary objects, and confusion, worsening over the last 3 days. His wife provided the history. There was no history of head trauma, loss of consciousness, involuntary movements, fever, headache, or neck pain. He was a non-smoker and did not consume alcohol. He had hypertension and was on medication, including alprazolam 0.25mg nightly for insomnia for the past 7 years.

Discussion:Hypercalcemia of malignancy can cause renal dysfunction, bone pain, GI disturbances, neuromuscular abnormalities, and less commonly, psychiatric symptoms like confusion, cognitive impairment, agitation, hallucinations, delusions, and psychosis. These symptoms can mimic primary psychiatric disorders, delaying diagnosis. High calcium levels disrupt neurotransmitter balance and neuronal excitability, causing structural brain changes such as cortical and subcortical calcifications. Diagnosis involves checking serum and urine calcium, parathyroid hormone (PTH), renal function, and assessing for bone metastases, with imaging studies like chest X-rays or CT scans to identify primary malignancies. Management includes hydration, diuresis, bisphosphonates, or calcitonin to lower calcium levels, with hemodialysis as a last resort. Typically, PTH is low in malignancy-related hypercalcemia, but recent cases show elevated PTH, necessitating further evaluation like PET CT scans even when PTH is high.

Conclusion:. A heightened index of suspicion is crucial for the timely diagnosis and appropriate management of this hypercalcemia of malignancy condition. Additionally, doctors must be vigilant when parathyroid hormone (PTH) levels are elevated, as this also necessitates further evaluation for