A DIAGNOSIS THAT IS FAHR FROM EXPECTED



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Introduction

Medical mimics of psychiatric symptoms have broad differentials. Emergency physicians often heuristically consider common possible medical causes in patient presenting with psychotic symptoms. CT brain may not be a part of routine workup in patient without red flags such as head trauma and positive neurological findings. This is a case of a patient with history of abnormal behavior and auditory hallucinations, who was diagnosed with the rare Fahr disease after an abnormal CT brain.

Case and Result

A 48-year-old lady presented with 1-week history of abnormal behaviour in addition to worsening auditory hallucinations for several months. Her family had noticed occasional peculiar behaviours since she was young, but she had never been investigated for any psychiatric or medical illnesses. She was not on any regular medication and denied illicit drug use. There was no history of fever or trauma. She was oriented to time, place and person, but mainly remained quiet and slow to respond to questions. There was no focal neurological deficit. All other physical examinations were unremarkable. CT brain showed symmetrical calcifications involving both basal ganglia and cerebral hemispheres. Blood investigations including serum calcium were normal. After further workup in medical ward, she was diagnosed with Fahr disease, and discharged few days later with neuromedical and psychiatric follow up.

Discussion

Fahr disease is a rare neurological disorder characterised by abnormal bilateral calcium deposits in basal ganglia and cerebral cortex.¹ Progressive psychosis as a clinical manifestation may predominate rather than neurological symptoms such as gait disturbance and movement disorders. Symptom's onset is typically between age 40 and 60 years.² Diagnosis is based on CT brain findings after ruling out calcium metabolism abnormality. Laboratory investigations including calcium, phosphate and parathyroid hormone help to differentiate from secondary causes such as hyperparathyroidism.³ There is currently no known cure for Fahr disease. For women, determination of genetic risk for future pregnancy should be considered due to the disease's inheritance pattern.⁴

Conclusion

Currently there is no clear guidelines for neuroimaging in patients with psychosis but was proven of value in diagnosing a rare medical mimic in this patient.



Picture showed CT brain of patient which reported as symmetrical basal ganglia calcification

Keywords: Fahr's disease, CT brain

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