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Case Report

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Mesial Temporal Sclerosis in an Extreme Age: A Case Report

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Introduction

Seizures are a result of abnormal neural activity with different behavioural changes displayed depending on the abnormal partial or global neural hyperactivity and the exact brain location [1].

Approximately 8% to 10% of the population will experience a seizure during their lifetime. Only about 2% to 3% of patients will develop epilepsy [2]. Temporal lobe epilepsy is with high prevalence amongst people with epilepsy and is frequently refractory to medical treatment. Structural and physiological changes, such as hippocampal sclerosis, are often present in patients with mesial temporal sclerosis [3].

Mesial Temporal Sclerosis can be detected in children during the first decade of life, but is not commonly found until adolescence [4]. There is no evidence of cases of mesial temporal sclerosis discovered in old age. Our case is of a 71 -year-old gentleman who admitted having episodes of seizure activity for the past 25 years. Sharing such a case would hopefully be an area of consideration for future diagnostic approaches and research.

Case Presentation

A 71-year-old male presented to the emergency department at Prince Sultan Military Medical City-Riyadh with a complaint of a recent episode of seizure where an urgent CT was done and revealed that there is no acute culprit identified. Later on, the patient has had a neurology consultation and he revealed the fact that he was experiencing seizure episodes for the past 25 years and an MRI of the brain was requested and revealed a classic imaging presentation of Mesial Temporal Sclerosis.

Discussion

Many cases of epilepsy are encountered while practicing medicine and coming up with a diagnosis might be challenging for many if the presentation of the diagnosis does not fit the usual scheme, most importantly the age factor. Our case is a 71 -year-old male who has had experienced seizure attacks for the past 25 years and never sought medical attention. After the MR imaging was done showing decrease in the volume of the left hippocampus with abnormal high FLAIR signal intensity and encephalomalacic

changes involving the left temporal lobe as well as an ipsilateral smaller fornix in keeping with the diagnosis of mesial temporal sclerosis (Figures 1a-1c).

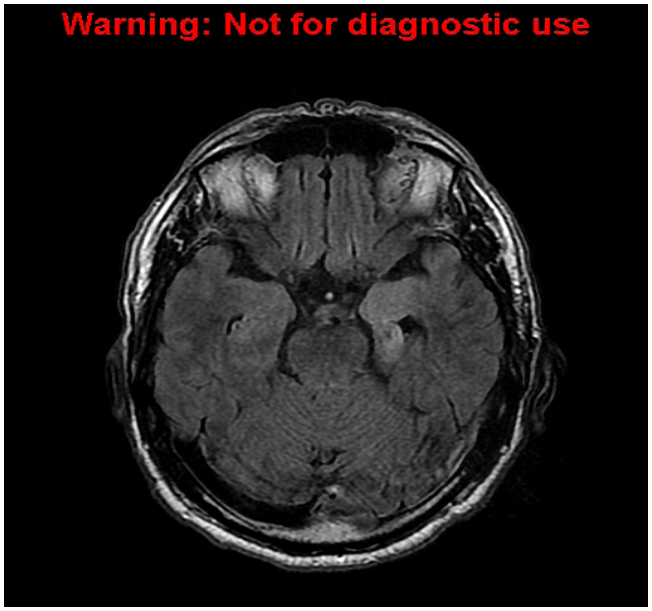

Figure 1a: Axial FLAIR MR image of the brain shows the high signal intensity of the left medial temporal lobe.

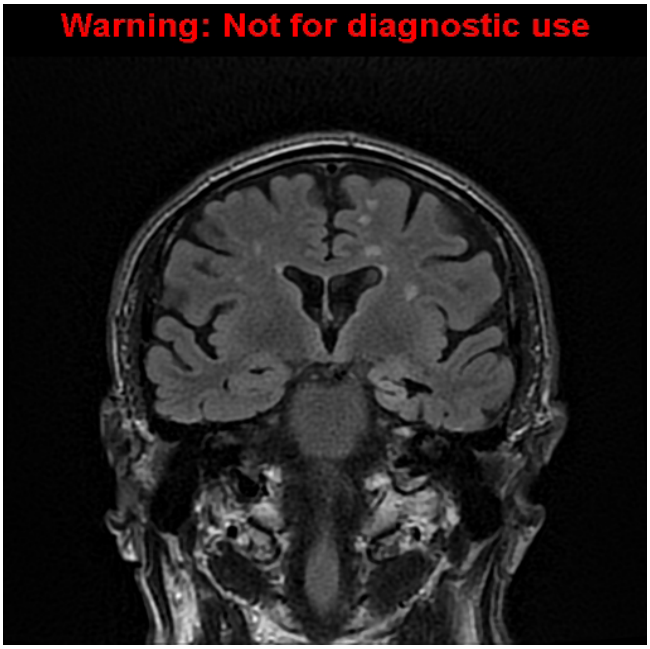

Figure 1b: Coronal FLAIR MR Image of the brain showing the high signal intensity involving the hippocampus. Vascular related white matter diseases, which are chronic microangiopathic.

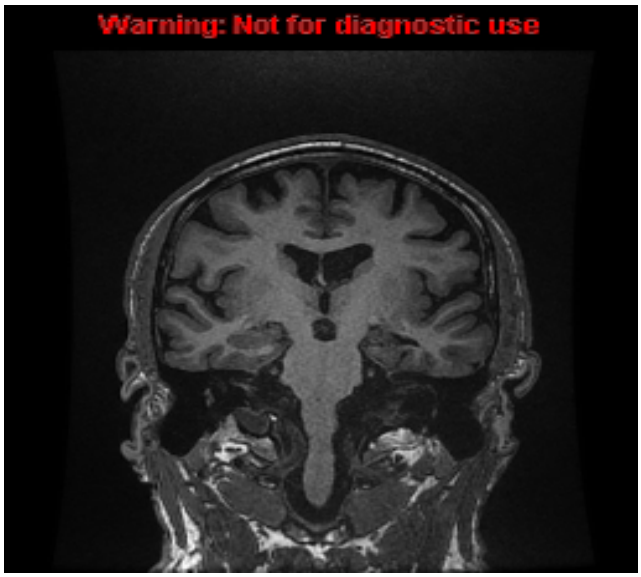

Figure 1c: Coronal 3DFSPGR image of the brain at the level of both hippocampi shows decrease in the volume of the left hippocampi with encephalomalacic changes of the left temporal lobe.

Ethical Approval

Case reports do not require ethical approval or patient consent, as there is no intervention and patient anonymity is maintained.

Conclusions and Recommendations

Cases of mesial temporal sclerosis present usually within children or early adulthood and introducing our case will hopefully aid in future diagnostic schemes and consideration as well as future researches.

References

1. Le T, Krause K (2011) First aid for the basic sciences: Organ systems. 2nd Edition. New York, NY: McGraw-Hill Medical.
2. Gavvala JR, Schuele SU (2016) New-onset seizure in adults and adolescents: A review: A review. JAMA 316: 2657-2668.
3. DaCosta JC, Portuguez MW, Marinowic DR, Schilling LP, Torres CM, et al. (2018) Safety and seizure control in patients with mesial temporal lobe epilepsy treated with regional superselective intra-arterial injection of autologous bone marrow mononuclear cells: Temporal lobe epilepsy treated with bone marrow mononuclear cells. J Tissue Eng Regen Med 12: e648-e656.
4. Liu Z, Mikati M, Holmes GL (1995) Mesial temporal sclerosis: pathogenesis and significance. Pediatr Neurol 12: 5-16.