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Case Report

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Strategic Stroke-Related Vascular Dementia in a Young Adult: A Case Report

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Introduction

Vascular dementia (VD) is the second most common cause of dementia after Alzheimer's disease. It can occur following a single stroke located in a so-called "strategic" region. In younger individuals, it remains rare but is particularly debilitating in terms of work and social life.

Observation

We report the case of a 48-year-old teacher, with no known history of neurodegenerative disease, who presented with a left thalamic ischemic stroke confirmed by MRI. Initially, his motor function improved, but a progressive cognitive decline appeared six months later: executive dysfunction, disorganization, attentional difficulties, and impaired working memory. Neuropsychological assessment confirmed a major cognitive impairment consistent with a visual impairment. A follow-up MRI showed the thalamic sequela and moderate vascular leukoencephalopathy. The Hachinski Ischemic Score was 8, reinforcing the vascular origin. This deficit had a significant functional impact on the patient's teaching, resulting in partial professional disability.

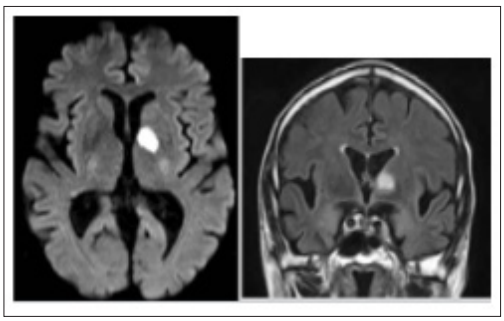

Figure 1: Left Thalamic Cerebral Infarction on Brain MRI

Discussion

Strategic strokes, particularly thalamic or fronto-subcortical strokes, disrupt the thalamo-frontal circuits involved in planning, memory, and attention. Post-stroke dementia most often develops within 6 to 12 months of the initial stroke. Diagnosis is based on the correlation between clinical findings, imaging, and vascular scores (Hachinski). Visual impairment in young adults presents particular challenges in terms of reintegration and cognitive rehabilitation.

Conclusion

The occurrence of a ventricular dysplasia (VD) following a strategic myocardial infarction must be recognized early, even in young individuals. Multidisciplinary management combining vascular prevention, cognitive rehabilitation, and occupational adaptation is essential to limit its functional impact [1-5].

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