CARDIAC FIBROELASTOMA AS A RARE CAUSE OF ISCHEMIC STROKE IN A YOUNG WOMAN: A CASE REPORT

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INTRODUCTION. Papillary fibroelastomas (PFEs) are rare and benign cardiac tumors carrying a high risk of embolic complications, such as ischemic strokes and transient ischemic attacks. In this report, we describe the incidental finding of a PFE of the mitral valve in a young who experienced clinical symptoms that were later recognized as manifestations of a cardioembolic ischemic stroke. We highlight the diagnostic challenges and underscore the importance of considering PFEs in patients presenting with ischemic stroke of unknown origin.

CASE REPORT. A 31-year-old woman presented to the emergency department with sudden-onset left-sided paraesthesia, a sensation of depersonalization and behavioral disturbances. Her medical history was notable for a previous, asymptomatic, post-traumatic cervical myelopathy. Neurological examination revealed lower limb hypopallesthesia and left-sided hyperreflexia. Laboratory tests were unremarkable. Spinal cord magnetic resonance imaging (MRI) confirmed myelopathy at the C5 level. Brain MRI demonstrated an area of hyperintense signal on FLAIR-T2 sequences, with mild diffusion restriction on DWI and slight hypointensity on ADC, in the right temporal region (Fig.1).

An inflammatory brain disorder was excluded based on negative oligoclonal bands, negative extensive autoimmune panel and unremarkable electroencephalogram. A second brain MRI showed a reduction of the previously observed DWI hyperintensity, consistent with the subacute evolution of an ischemic lesion, thereby raising suspicion of an ischemic stroke. Among an extensive diagnostic work up for juvenile stroke, the transesophageal echocardiography revealed a soft, round, mobile mass measuring 7 × 6 mm attached to the anterior mitral leaflet (Fig.2). Infective endocarditis was ruled out based on negative blood cultures and a negative 18F-FDG PET/CT scan. Surgical resection was performed and histopathological examination confirmed the diagnosis of PFE.

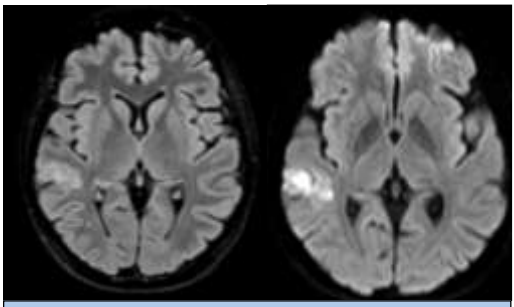

Fig.1 . Brain MRI (FLAIR/DWI sequences) shows an area of hyperintense signal with mild diffusion restriction in the right temporal region.

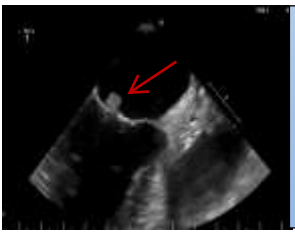

Fig.2 On TEE mobile mass measuring 7 × 6 mm attached to the anterior mitral leaflet

DISCUSSION: Although PFEs are benign, embolization of tumor fragments or, rarely, the entire mass can lead to cerebral ischemia. Prompt recognition of these tumors is essential to prevent embolization to various organs, including the brain. After excluding conventional stroke risk factors such as atherosclerosis and coagulation disorders, PFE should be considered, particularly in younger patients with cryptogenic stroke. In this case, the patient's clinical presentation and imaging findings were initially misleading and only the second brain MRI and subsequent cardiac evaluation led to the correct diagnosis of the mitral valve mass.

CONCLUSIONS: This case underscores the importance of including PFEs in the differential diagnosis of unexplained cerebral ischemic events, even in young patients without known stroke risk factors. Early recognition and surgical intervention can prevent recurrent embolic events and improve patient outcomes.

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