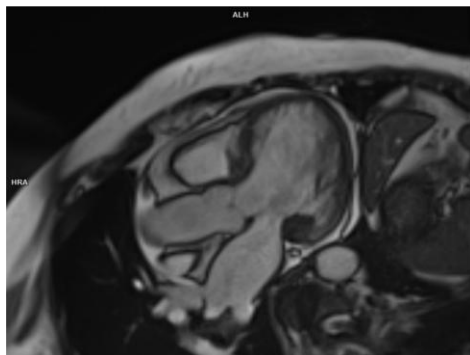
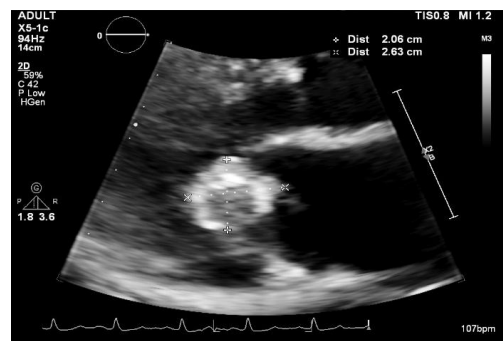
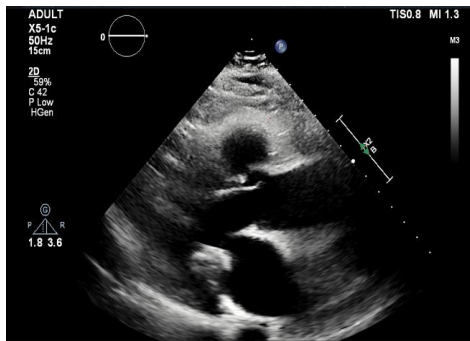


## The Mysterious Mass in Cardiac Chamber

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A 61-year-old woman presented with dyspnea on exertion. Her vital signs and physical examination findings were normal. Basic laboratory results were within normal limits. She underwent an echocardiogram to evaluate cardiac function. A transthoracic echocardiogram revealed a cystic mass attached to the posterior annulus of the mitral valve. Cardiac magnetic resonance imaging (CMR) was performed to detect residual myocardial ischemia and confirmed the diagnosis of caseous calcification of the mitral annulus, measuring 2 × 2.6 cm.

In this case, coronary angiography revealed multivessel disease with a mass-like blood supply shadow on the cineangiography view. She was scheduled for surgical revascularization as soon as possible.

Caseous calcification of the mitral annulus (CCMA) is a rare variant of mitral annular calcification (MAC), a chronic degenerative process that typically occurs in elderly patients, particularly women. Hypertension, chronic kidney disease (CKD), and altered calcium-phosphate metabolism are also associated with this condition<sup>1</sup>. CCMA is observed in approximately 0.067% of all echocardiographic examinations and is present in 0.63% of all patients with MAC<sup>2</sup>. The mass-like calcification should be included in the differential diagnosis of cardiac masses when determining treatment options.

Caseous calcification is commonly asymptomatic; therefore, unnecessary treatment should be avoided, and monitoring the patient's progress is recommended in most cases<sup>3</sup>. Rarely, caseous calcification may cause mitral valve regurgitation, fistula formation, or systemic embolization<sup>4</sup>, in which case surgical removal of the mass should be considered.

## **Reference**

1. Birkhoelzer SM, Thamman R. Caseous mitral annulus calcification: A rare complication of a common disease that needs recognition. *J Am Coll Cardiol Case Rep.* 2021;3(1): 109-11.
2. Dietl CA, Hawthorn CM, Raizada V. Risk of cerebral embolization with caseous calcification of the mitral annulus: Review article. *Open Cardiovasc Med J.* 2016;10:221-32.
3. García-Ibarrondo N, Lang RM. Caseous calcification of the mitral annulus, A rare echocardiographic finding. *Rev Esp Cardiol.* 2011;64(9):828-31.
4. Fujiwara M, Hatani Y, Fujimoto W, Yamashita S, Imanishi J, Iwasaki M, et al. Three cases of caseous calcification of the mitral annulus resulting in spontaneous fistulation CASE (Phila). 2022;6(8): 355-60.