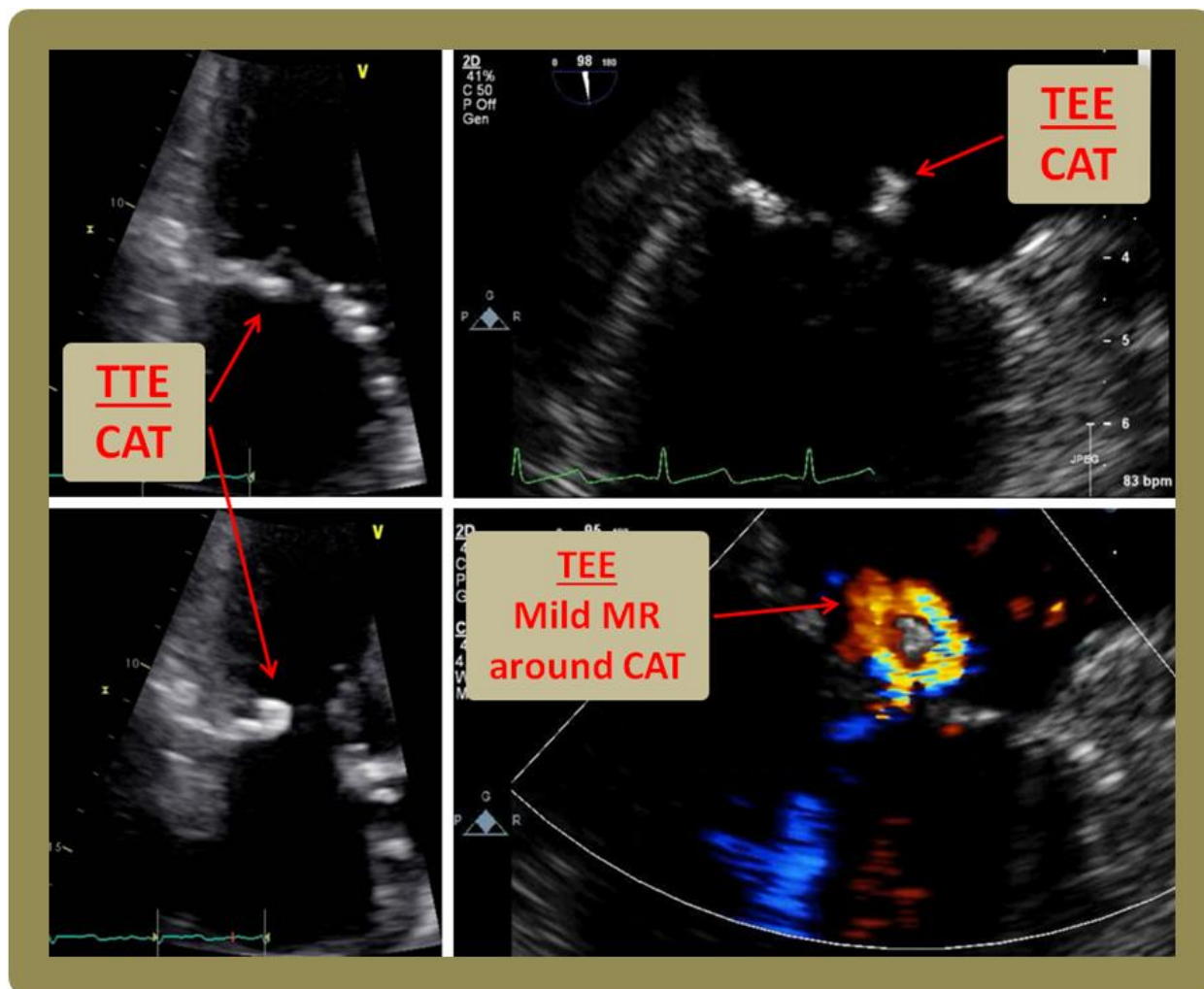


Cardiac CAT..Where Does it Like to Hide?

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Description

Cardiac calcified amorphous tumor (CAT) is a poorly characterized nonneoplastic endocardially based intracavitary cardiac masses, first describe as such by Reynolds and colleagues [1]. It has been reported more often in patients with end-stage renal disease and on hemodialysis, likely due to ectopic calcifications [2, 3]. Cardiac CAT can be and incidental finding on an imaging study [4], but may also present with detrimental embolic manifestations [5].

Although more often they are initially diagnosed on echocardiography, multimodality imaging may provide better delineation and localization [6]. Depending on its embolization potential or disruption of valvular competency, treatment can be conservative or surgical. As in the image above, Cardiac CAT can present as a mass swinging from the mitral valve or annulus, and must be differentiated from endocarditis [7, 8].

Although it has been reported and removed from any cardiac chamber, cardiac CAT appears to have a predilection to hiding along the mitral valve annulus, especially in dialysis patients [9]. It should, therefore, be carefully differentiated from heavy mitral annular calcifications [10].

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References:

1. Reynolds C, Tazelaar HD, Edwards WD. Calcified amorphous tumor of the heart (cardiac CAT). *Hum Pathol.* 1997 May;28(5):601-6.
2. Yoshimura S, Kawano H1, Minami T, Tsuneto A, et al. Cardiac Calcified Amorphous Tumors in a Patient with Hemodialysis for Diabetic Nephropathy. *Intern Med.* 2017 Nov 15;56(22):3057-3060.
3. Takeuchi T, Dohi K, Sato Y, et al. Calcified amorphous tumor of the heart in a hemodialysis patient. *Echocardiography.* 2016 Dec;33(12):1926-1928.
4. Kawata T, Konishi H, Amano A, et al. Wavering calcified amorphous tumour of the heart in a haemodialysis patient. *Interact Cardiovasc Thorac Surg.* 2013 Feb;16(2):219-20.
5. Kyaw K, Latt H, Aung SSM, et al. A Case of Cardiac Calcified Amorphous Tumor Presenting with Concomitant ST-Elevation Myocardial Infarction and Occipital Stroke and a Brief Review of the Literature. *Case Rep Cardiol.* 2017;2017:8578031.
6. Xu F, Xiao Z, Peng L, et al. A Rare Case of Cardiac Calcified Amorphous Tumor: Multi-Modality Imaging Evaluation. *Am J Case Rep.* 2018 Feb 27;19:214-217.
7. de Hemptinne Q, Bar JP, de Cannière D, et al. Swinging cardiac calcified amorphous tumour arising from a calcified mitral annulus in a patient with normal renal function. *BMJ Case Rep.* 2015 Jan 7;2015. pii: bcr2014207401.
8. Fujiwara M, Watanabe H, Iino T, et al. Two cases of calcified amorphous tumor mimicking mitral valve vegetation. *Circulation.* 2012 Mar 13;125(10):e432-4.
9. de Hemptinne Q, de Cannière D, Vandebossche JL, et al. Cardiac calcified amorphous tumor: A systematic review of the literature. *Int J Cardiol Heart Vasc.* 2015 Jan 29;7:1-5.
10. Nakamaru R, Oe H, Iwakura K, et al. Calcified amorphous tumor of the heart with mitral annular calcification: a case report. *J Med Case Rep.* 2017 Jul 18;11(1):195.

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