

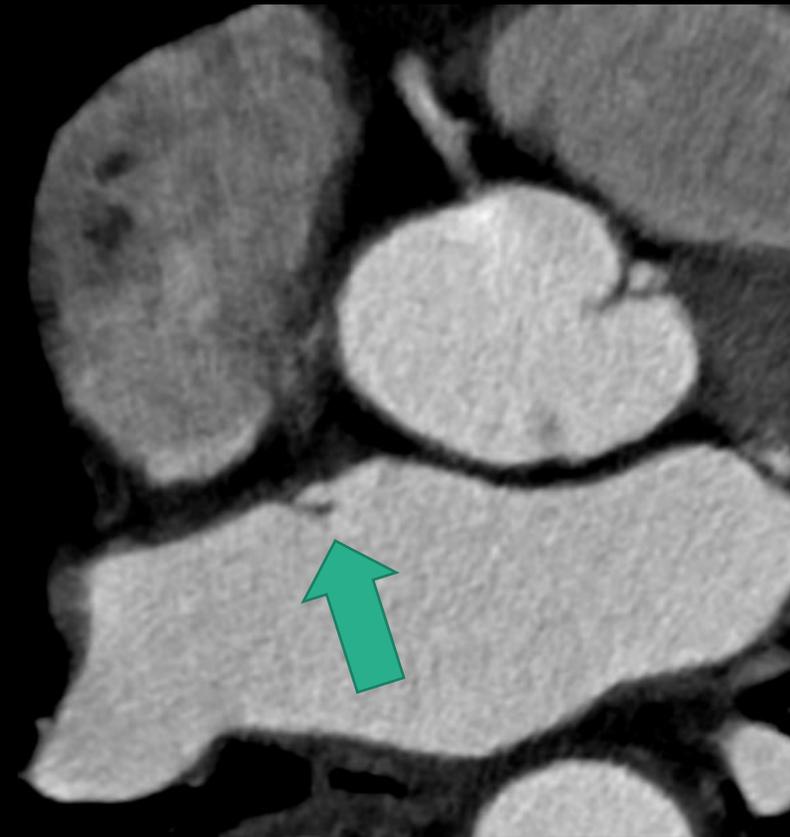
Staff rx 04/12

Puissant Guillaume

Secteur Thorax

Niveau: base (2-3)

Question : quelle bande intra-cardiaque n'est pas une structure normale ?



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Crista Terminalis



Bande modératrice



Bande atriale aberrante

Bandes cardiaques

- Découvertes fortuites +++
- Structures normales peuvent mimer des pathologies
- Structures normales + variantes de la normale
- Structures aberrantes
- Structures pathologiques

Bandes cardiaques

Table 1: Types of Bands in the Heart

Normal structures and variants

Crista terminalis

Taenia sagittalis

Chiari network

Coronary ridge

Moderator band

Papillary muscles

Chordae tendineae

Aberrant structures

Aberrant papillary muscles

Accessory chordae

Accessory mitral valve tissue (AMVT)

Aberrant ventricular bands

Aberrant atrial bands

Pathologic entities

Double-chambered right ventricle (RV)

Double-chambered left ventricle (LV)

Cor triatriatum sinister

Cor triatriatum dexter

Subaortic stenosis

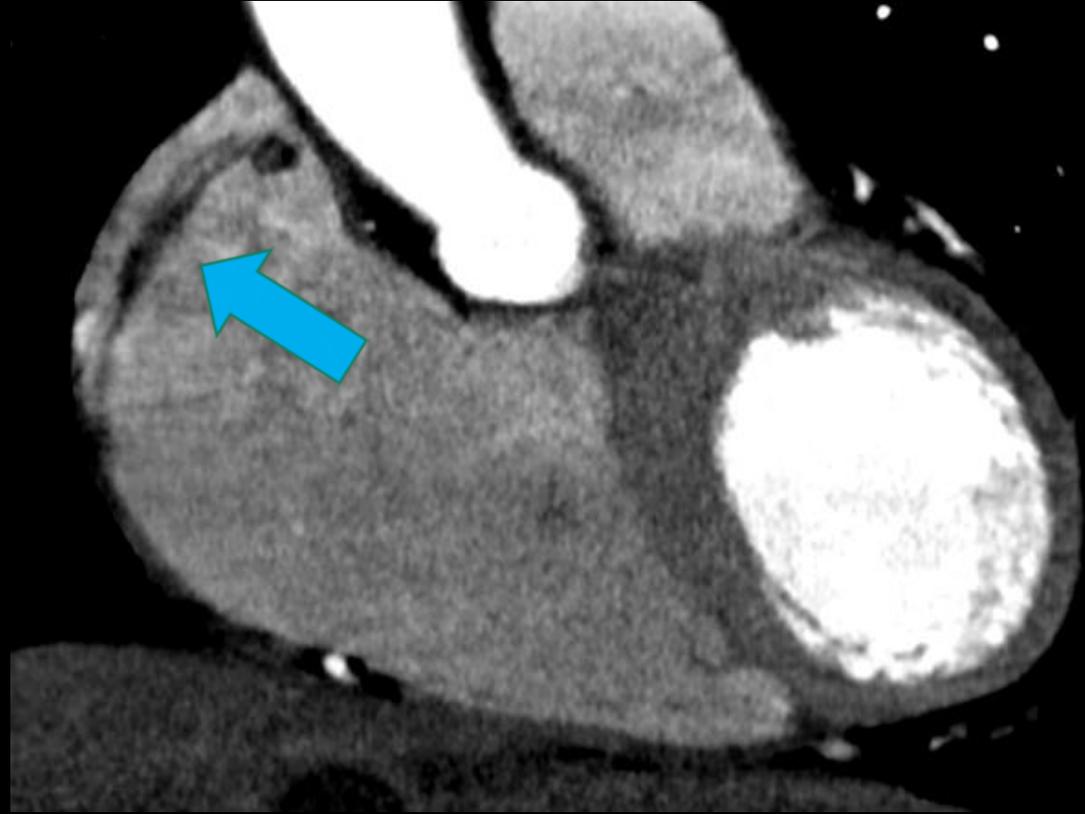
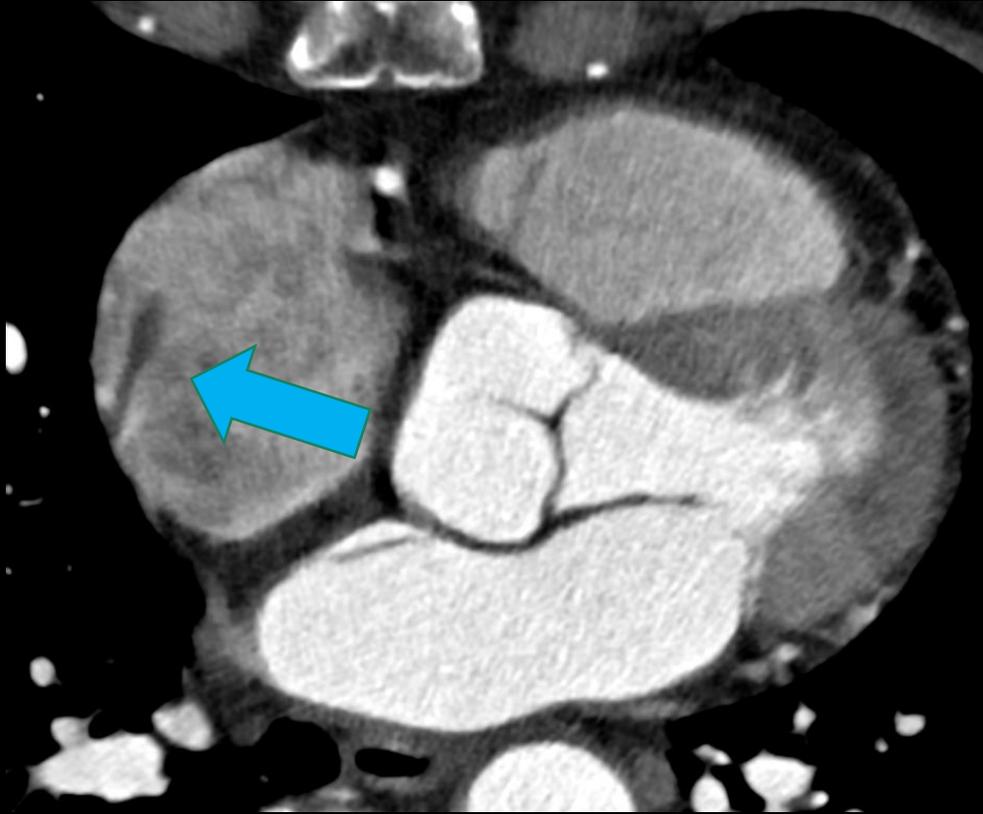
Shone complex

Bands in the Heart: Multimodality Imaging Review

Prabhakar Rajiah, MD
James MacNamara, MD
Abhishek Chaturvedi, MD
Ravi Ashwath, MD
Nicholas L. Fulton, MD
Harold Goerne, MD

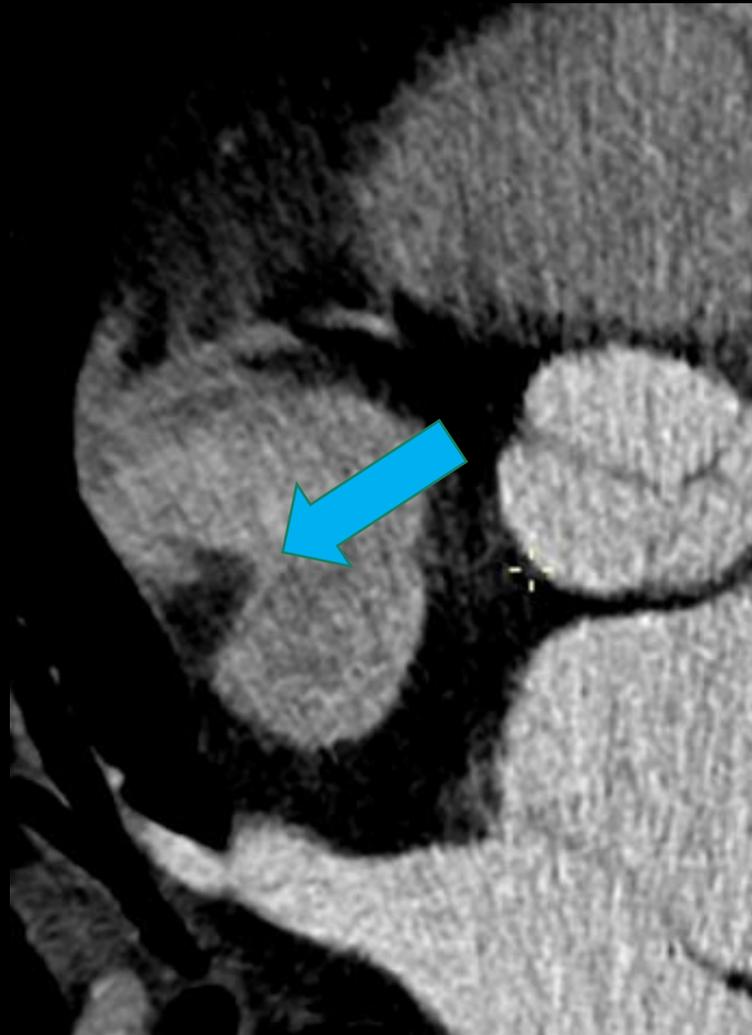
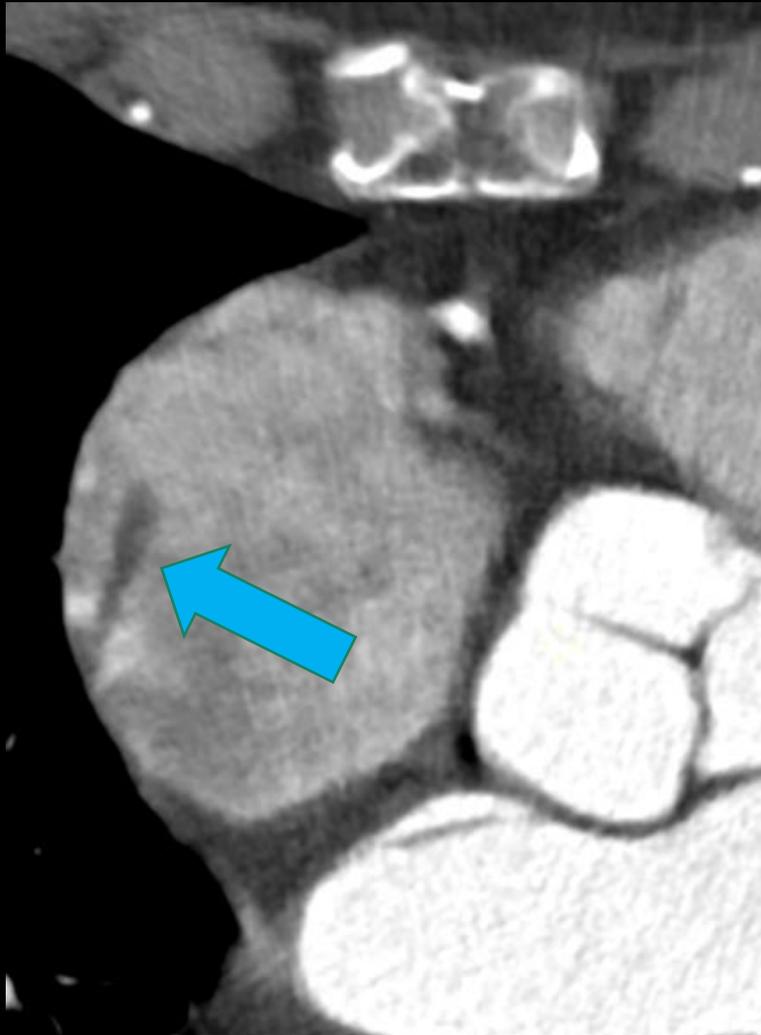
Multiple bands and bandlike structures can be found within the cardiac chambers, which can be evaluated with various imaging modalities including echocardiography, CT, MRI, and invasive angiography. These bands can be classified as normal structures or normal variants, aberrant structures, or pathologic entities. Normal structures include the crista terminalis, taenia sagittalis, Chiari

Crista Terminalis



Structure normale
Bande fibro-musculaire – résidu embryonnaire
Topographie classique : le long de la paroi postéro-latérale de l'OD
Forme typique: C-allongé.
Taille nle **3-6mm** (pas de consensus) avec épaissement crânial

Crista Terminalis



Importantes variations morphologiques

Parfois épaissie (40%) **15mm**

Lipomatose du septum Inter-atrial

Lisse

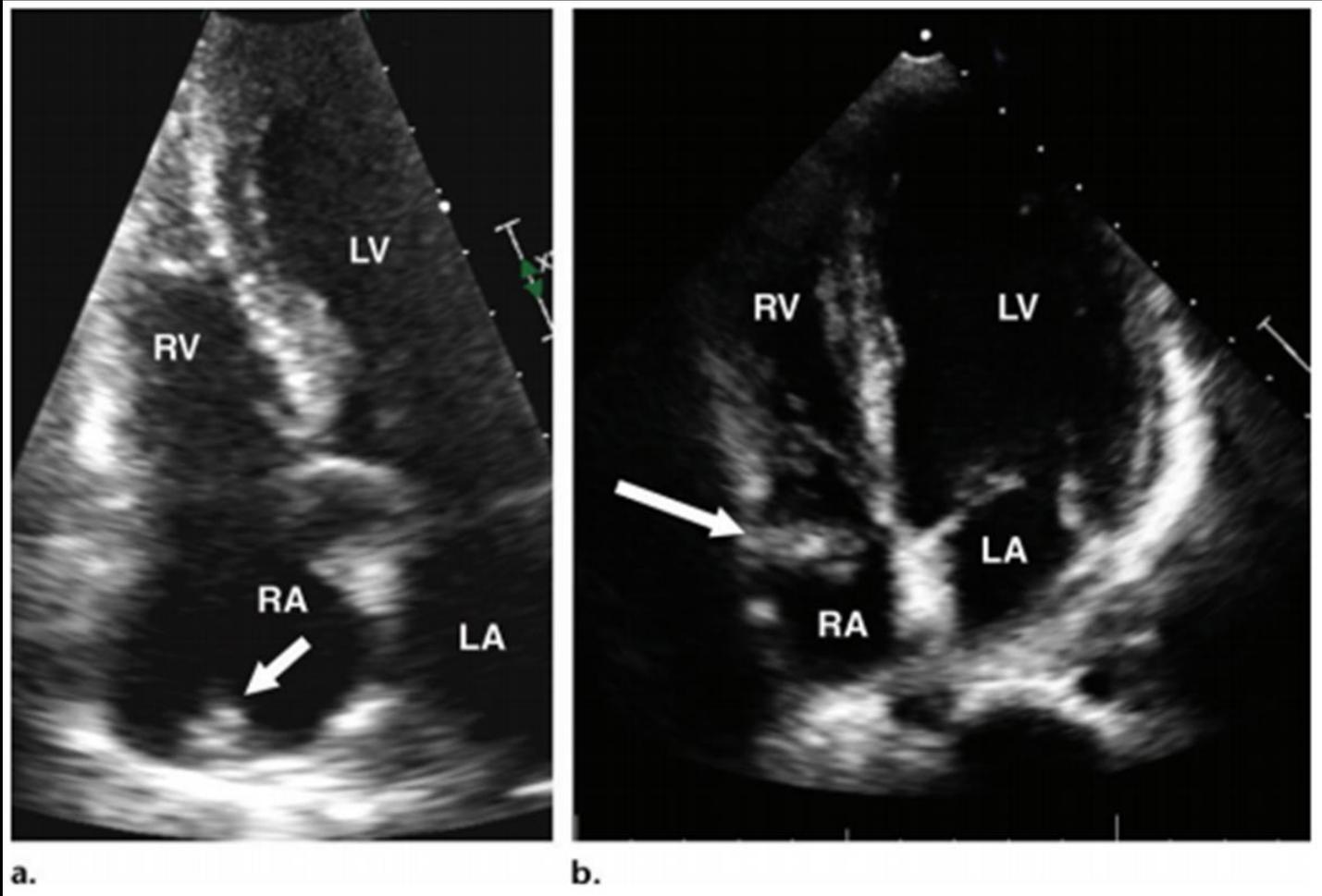
Bien définie

Densité // myocarde

Topographie classique

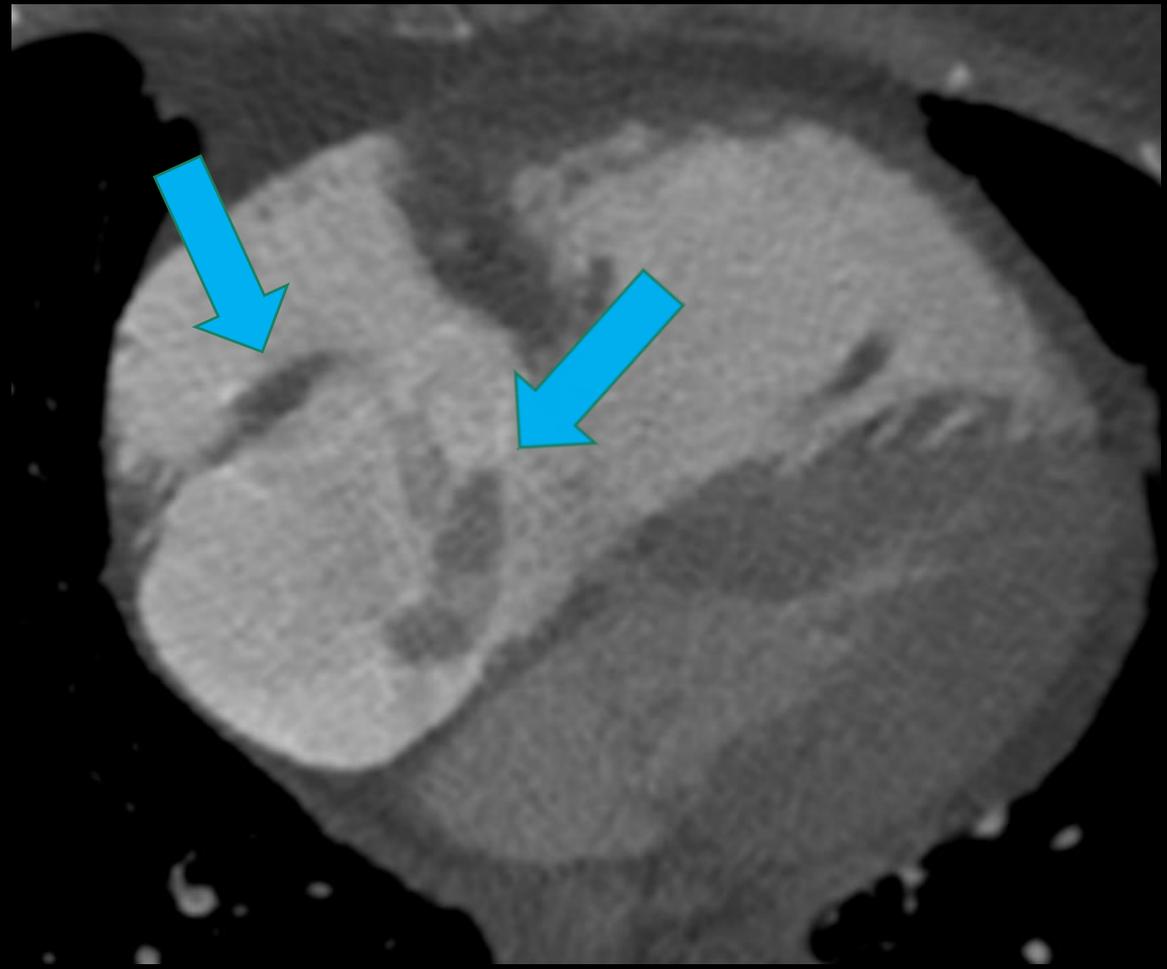
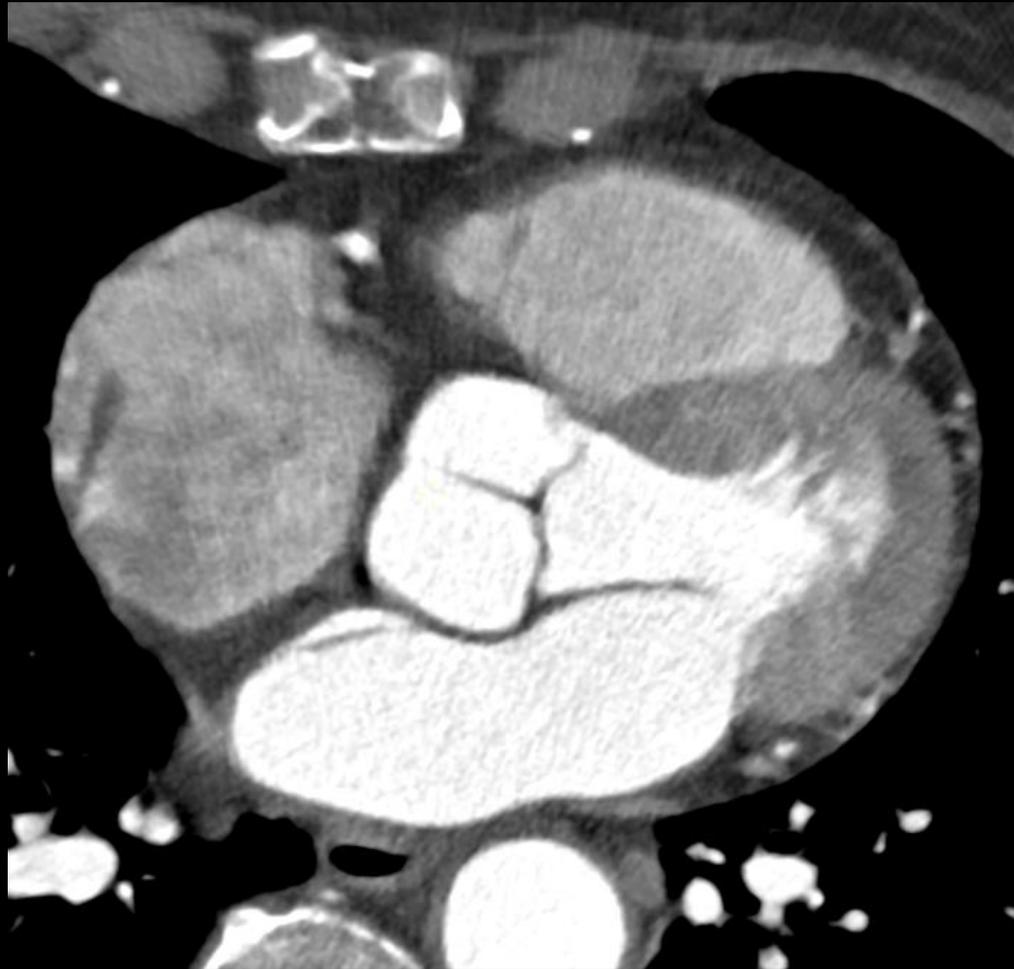
DD masse/thrombus

Crista Terminalis – écho cardiaque

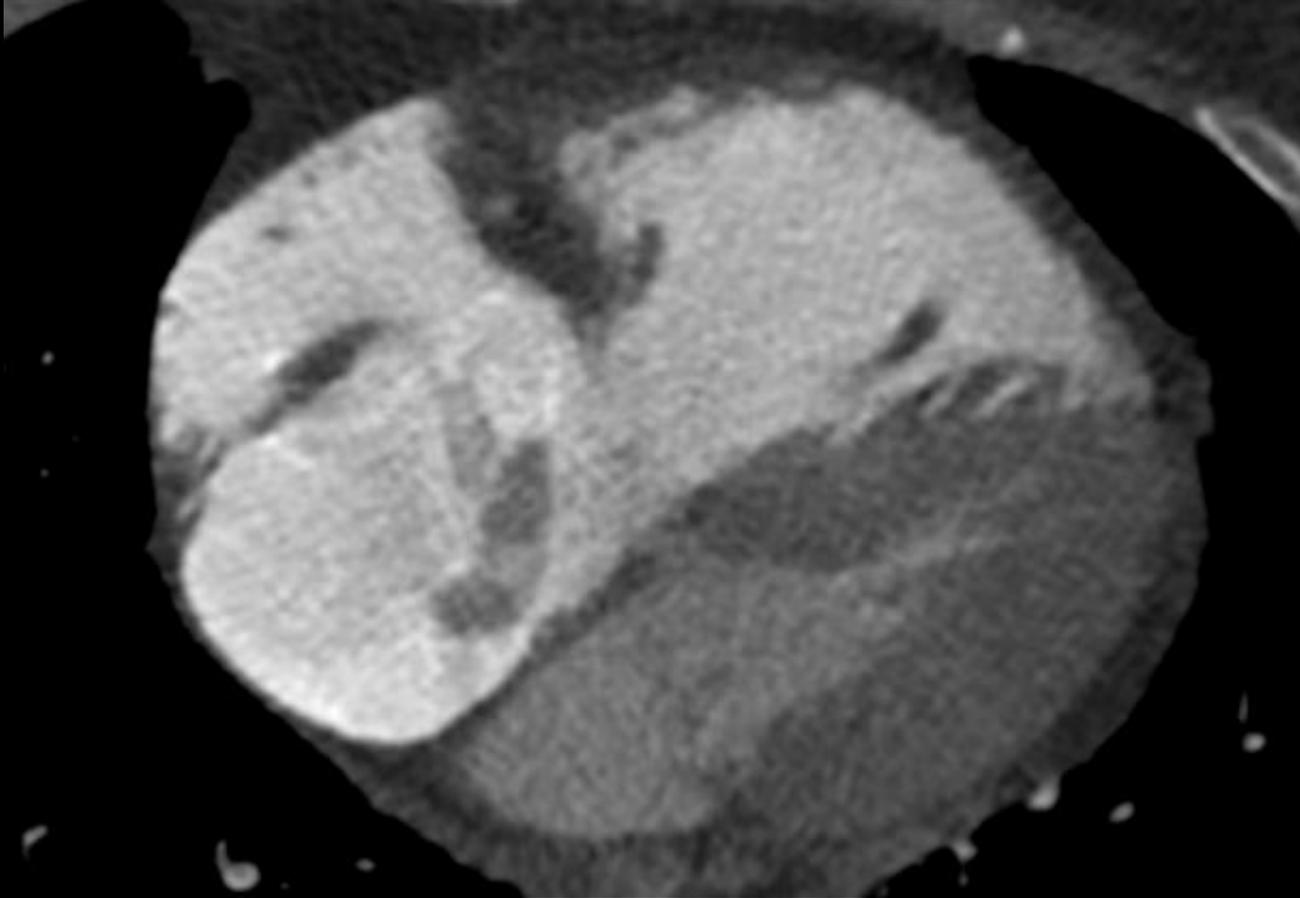


Epaissement // thrombus

Crista Terminalis vs thrombus



Crista Terminalis vs thrombus



Crista terminalis

Position typique

Lisse/bien définie

Même densité/rehaussement que le
myocarde adjacent

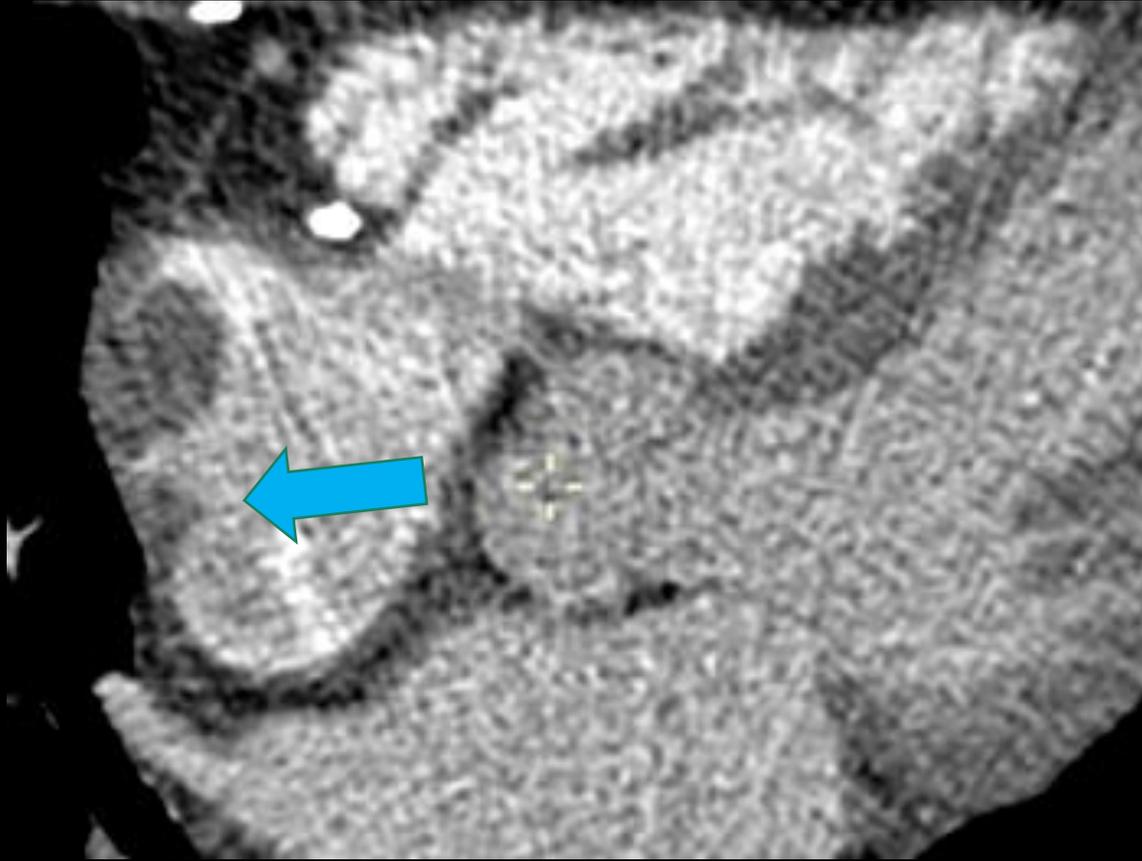
Thrombus

Irréguliers

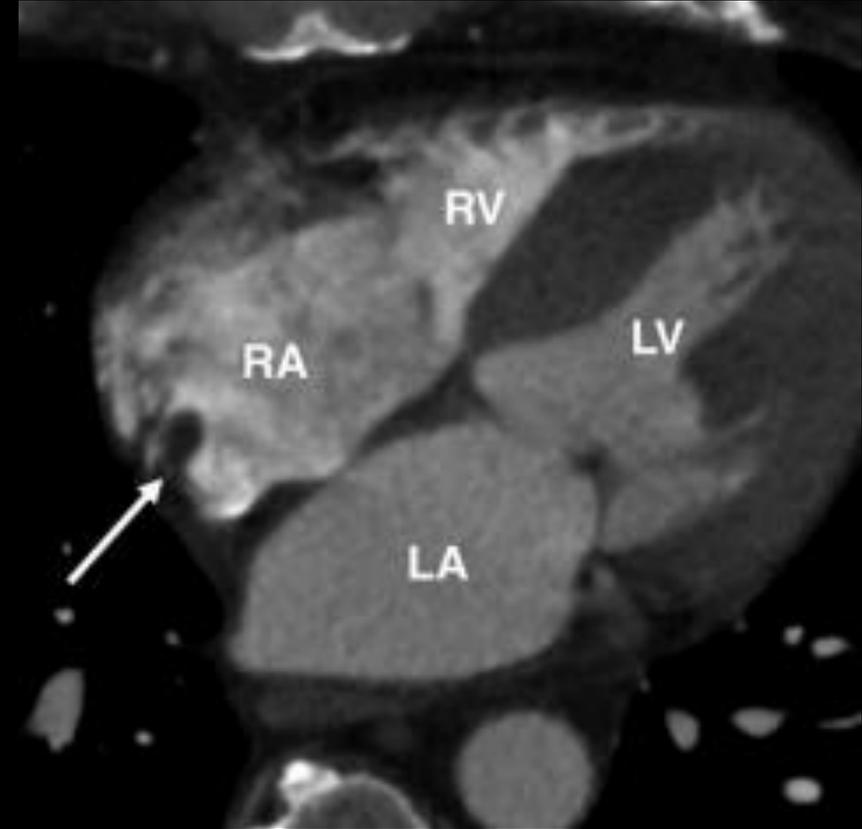
(Multiples)

(Artéfacts de mouvement)

Crista Terminalis vs masse/thrombus

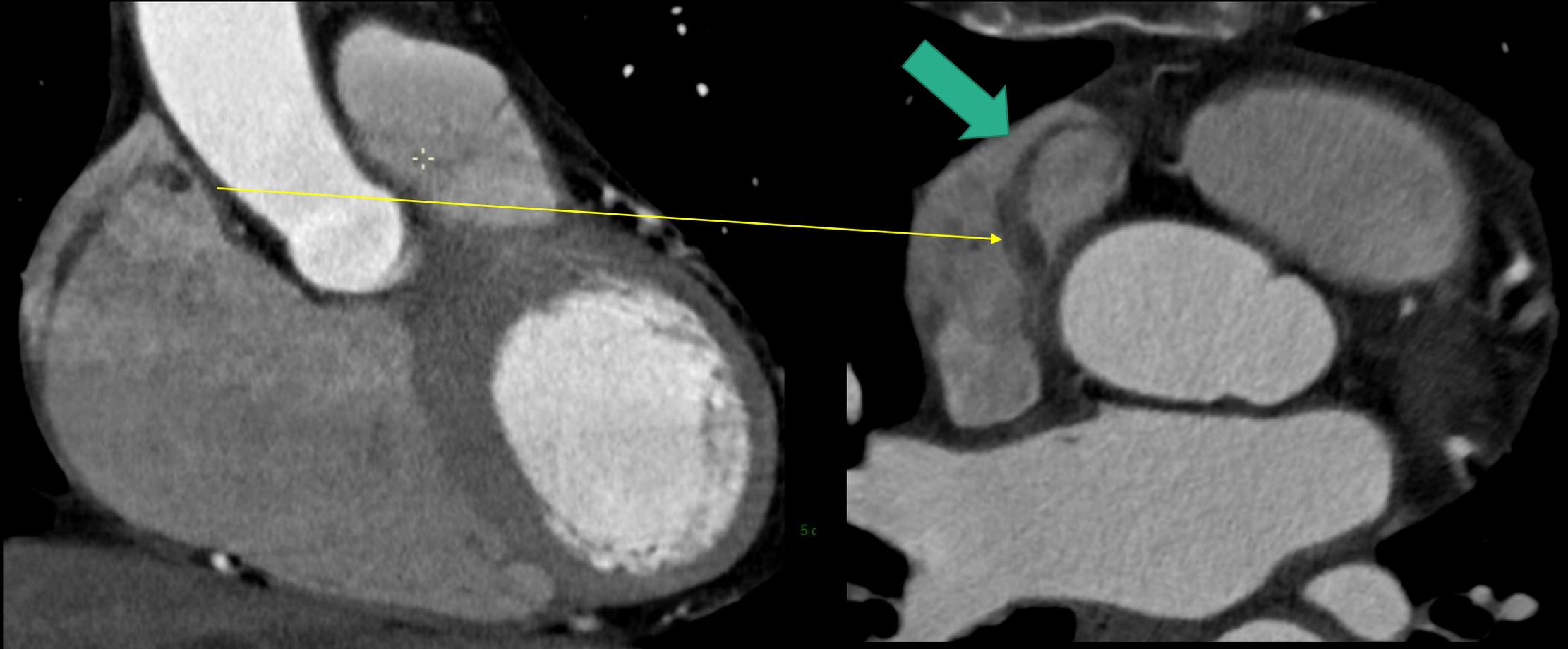


Position/forme typique



Epaissi mais topographie typique

Taenia-Sagittalis



Bande modératrice

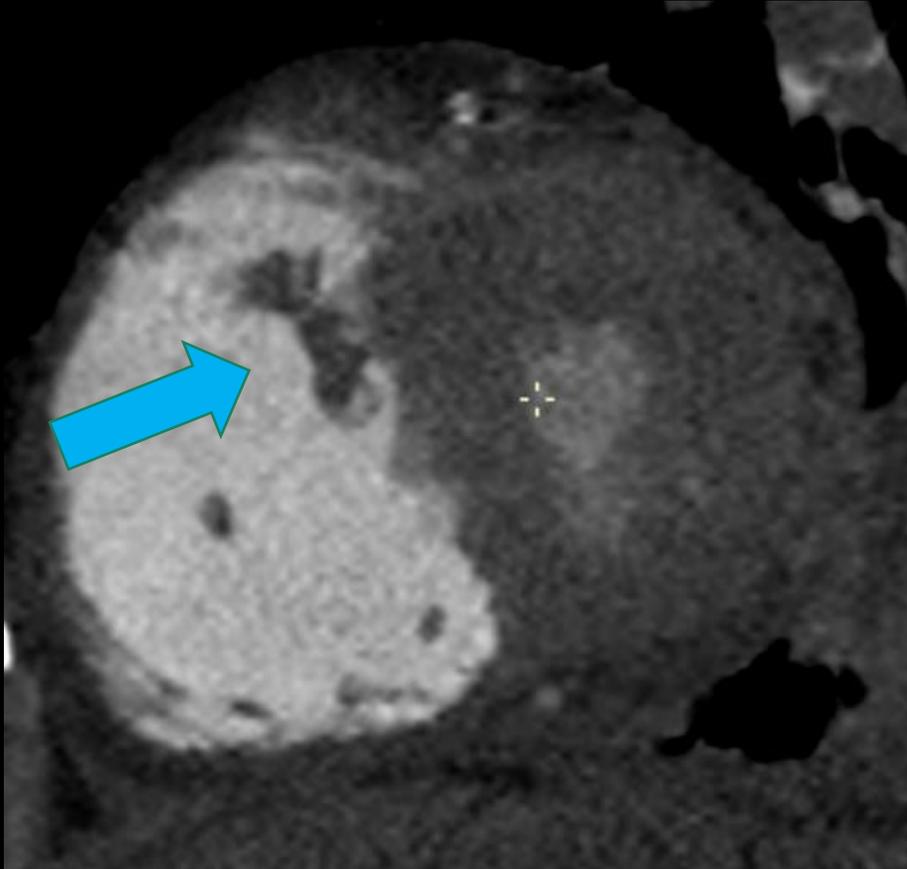


Bande musculaire normale (92%)

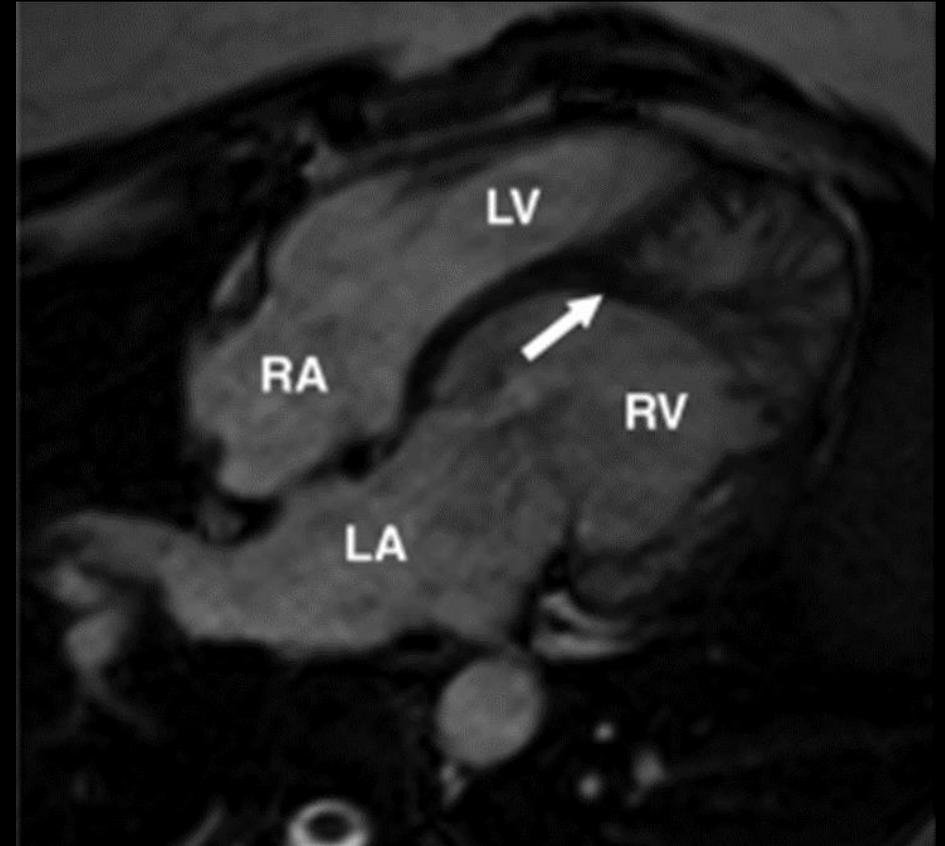
Septum inter-ventriculaire → paroi libre du VD

Indique le ventriculaire droit

Bande modératrice

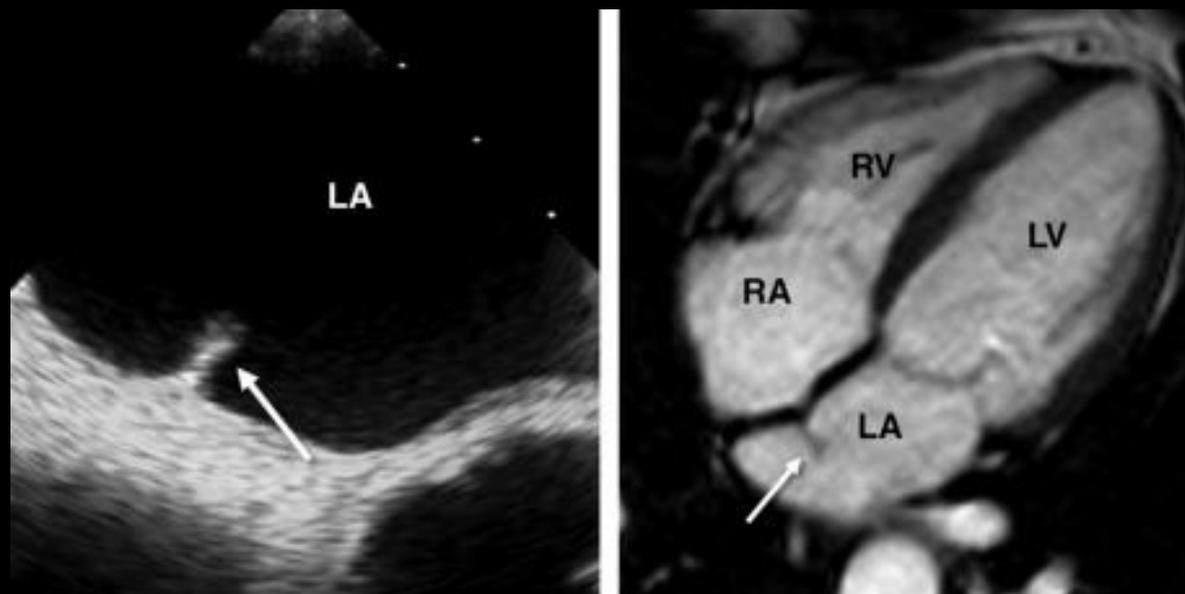


DD thrombus ventriculaire droit



Signe morphologique du VD dans les cardiopathies congénitales

Bande atriale aberrante

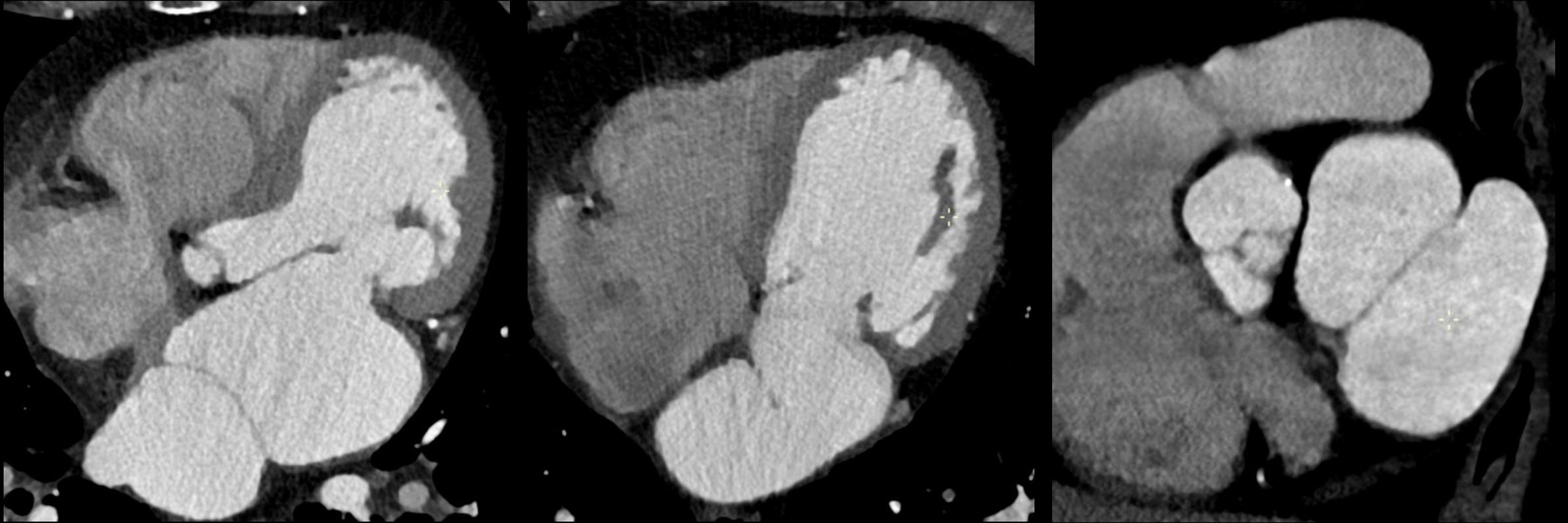


Structure aberrante congénitale (OG>OD)

A signaler : association arythmies
supraventriculaires

Origine de la FO ++

Cor Triatrium (sinister)



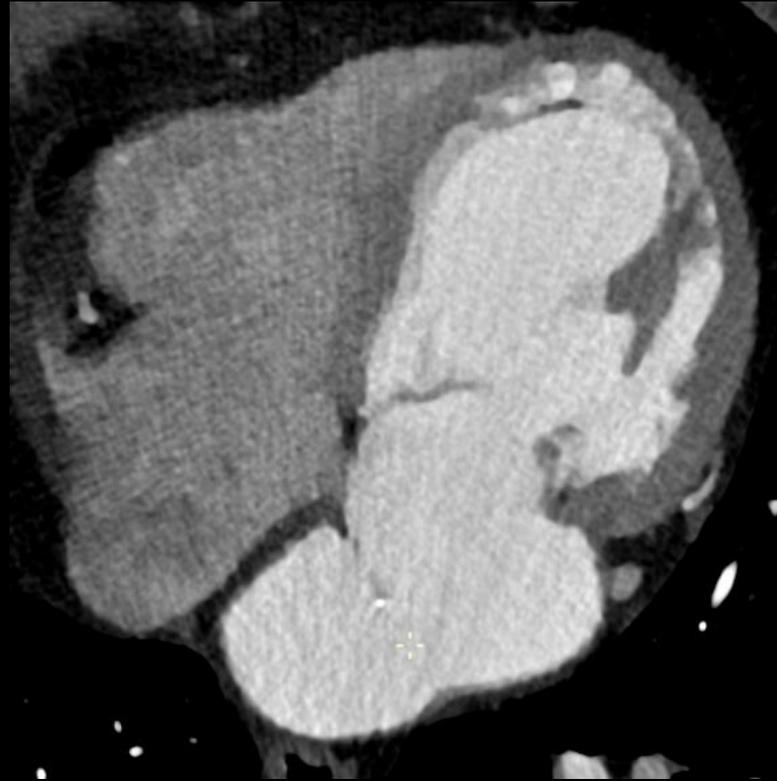
Septum qui divise l'OG en deux chambres.

Partie postérieure contenant l'ostium des VP – Partie antérieure contenant l'orifice mitral et l'AG.
Malformations vasculaires associées.

Cor Triatrium (sinister)



Chambre postérieure : abouchement VP



Communication

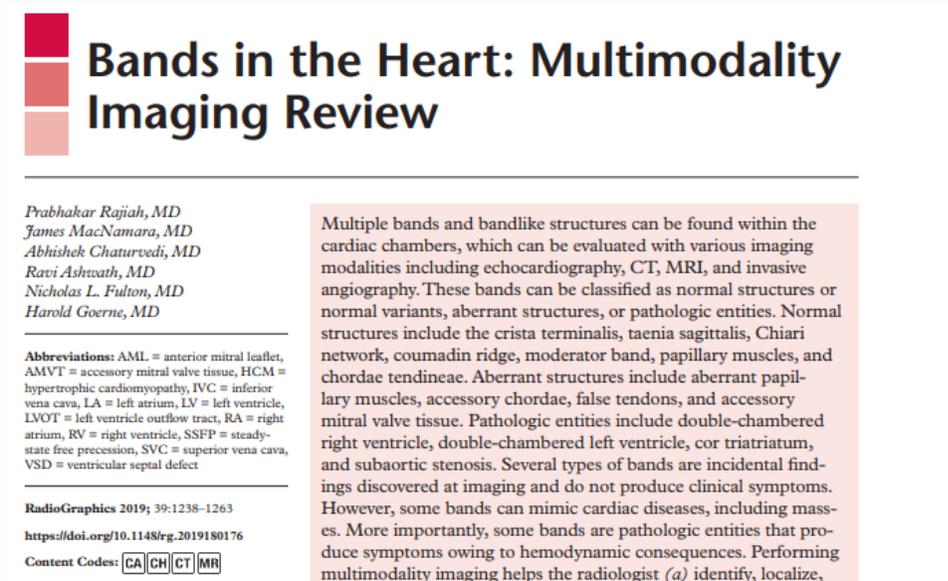


Take home message

- Bandes cardiaques normales avec multiples variations → ne pas confondre avec des structures pathologiques

Source :

Rajiah et al. Bands in the heart: Multimodality Imaging Review: Radiographics; 39, 1238-1263



Bands in the Heart: Multimodality Imaging Review

*Prabhakar Rajiah, MD
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Abbreviations: AML = anterior mitral leaflet, AMVT = accessory mitral valve tissue, HCM = hypertrophic cardiomyopathy, IVC = inferior vena cava, LA = left atrium, LV = left ventricle, LVOT = left ventricle outflow tract, RA = right atrium, RV = right ventricle, SSFP = steady-state free precession, SVC = superior vena cava, VSD = ventricular septal defect

RadioGraphics 2019; 39:1238-1263
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Content Codes: **CA** **CH** **CT** **MR**

Multiple bands and bandlike structures can be found within the cardiac chambers, which can be evaluated with various imaging modalities including echocardiography, CT, MRI, and invasive angiography. These bands can be classified as normal structures or normal variants, aberrant structures, or pathologic entities. Normal structures include the crista terminalis, taenia sagittalis, Chiari network, coumadin ridge, moderator band, papillary muscles, and chordae tendineae. Aberrant structures include aberrant papillary muscles, accessory chordae, false tendons, and accessory mitral valve tissue. Pathologic entities include double-chambered right ventricle, double-chambered left ventricle, cor triatriatum, and subaortic stenosis. Several types of bands are incidental findings discovered at imaging and do not produce clinical symptoms. However, some bands can mimic cardiac diseases, including masses. More importantly, some bands are pathologic entities that produce symptoms owing to hemodynamic consequences. Performing multimodality imaging helps the radiologist (a) identify, localize,

