

# Case of the Month

- F/70
- C.C. : incidentally cardiac mass on health examination
- PMH > HTN(+)
- HR : 54-67-75

Registered Date

**December, 2007**

Presenter

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Category

Subspecialty

Radiology

Classification

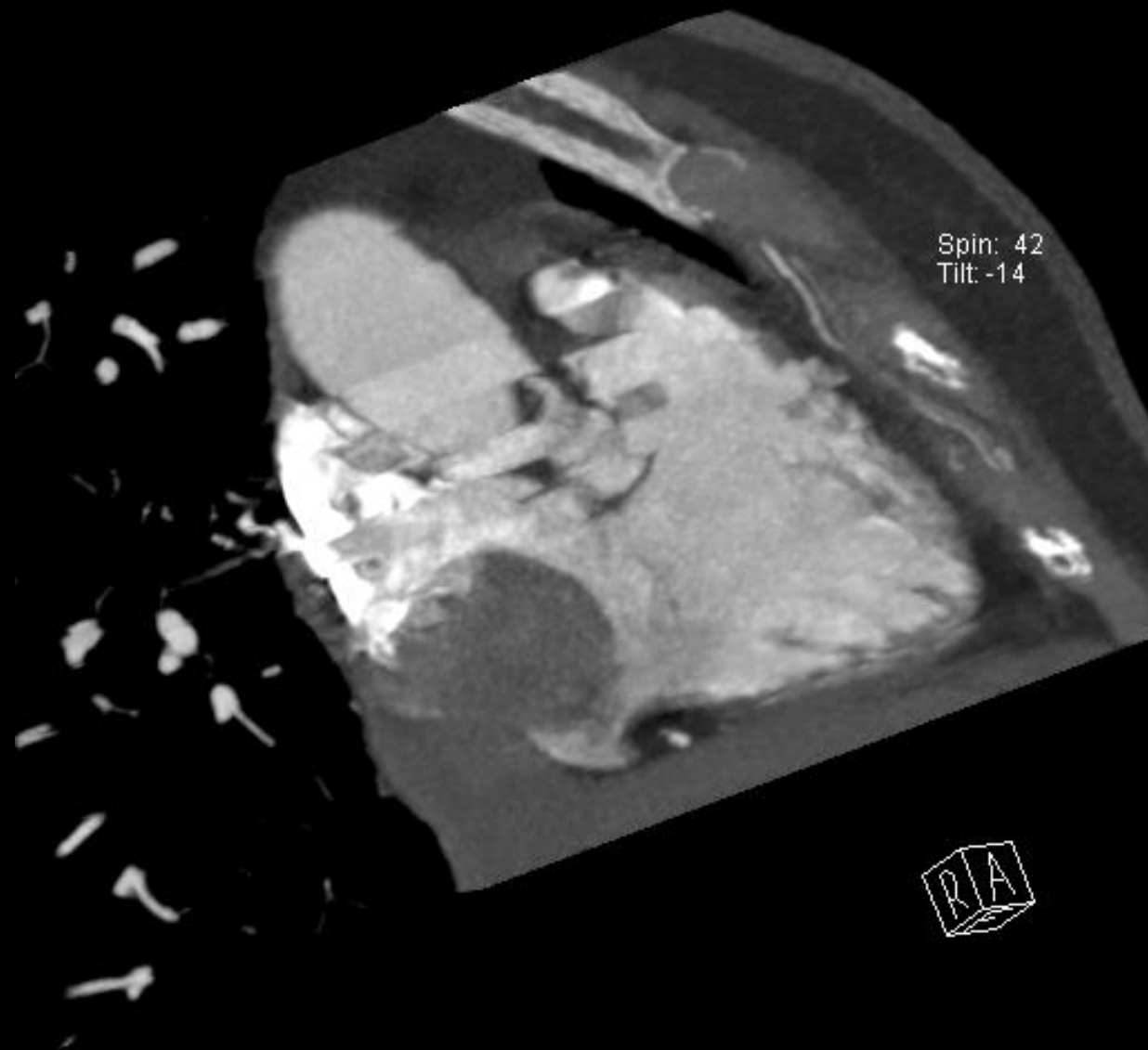
Difficulty

Moderate

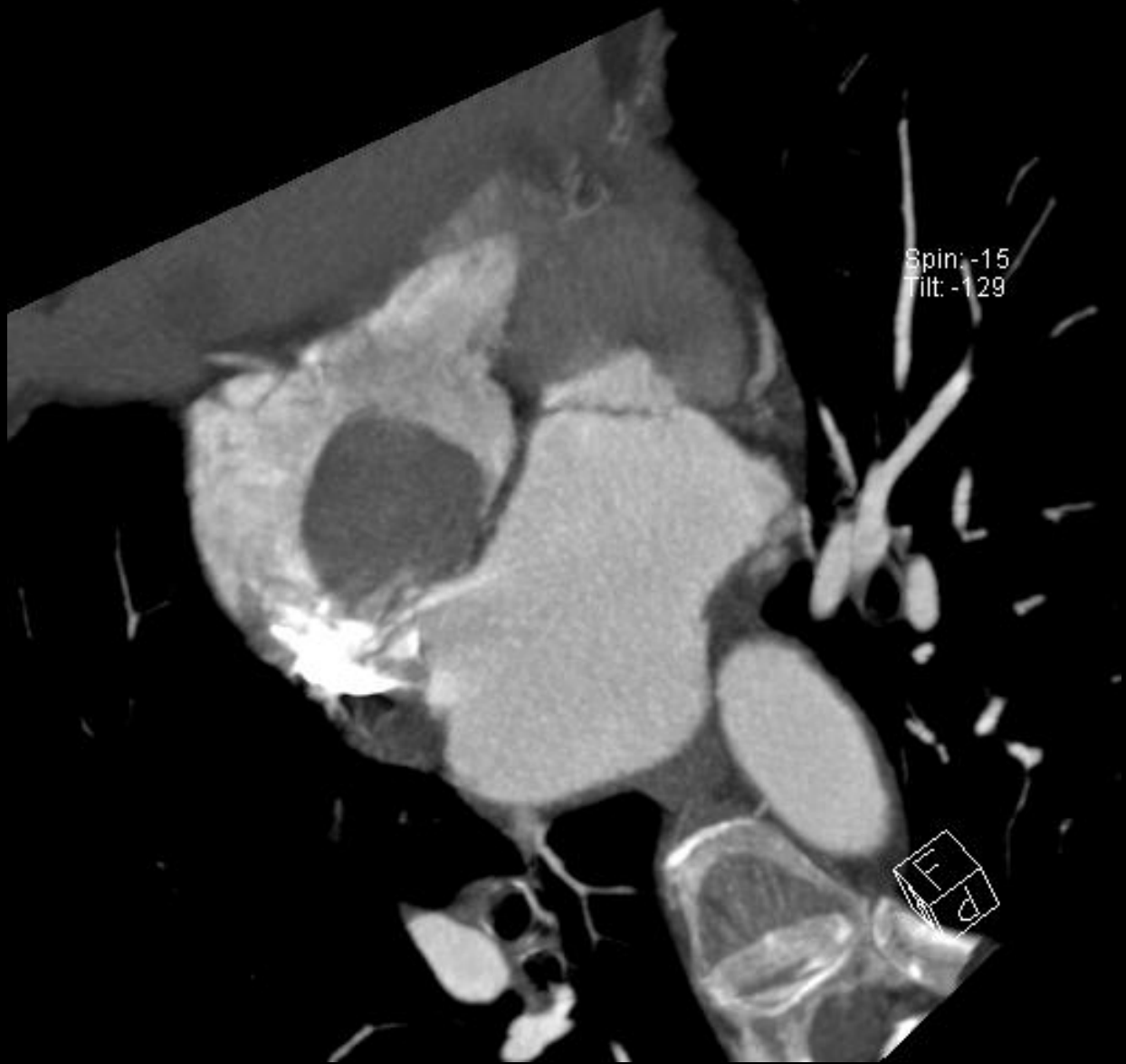
Modality

MDCT





2CH



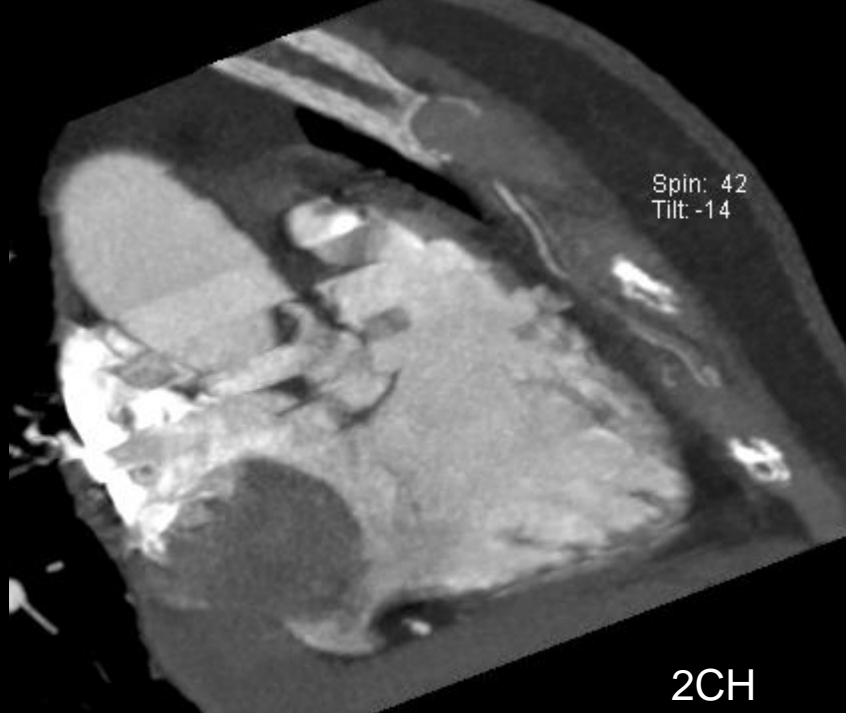
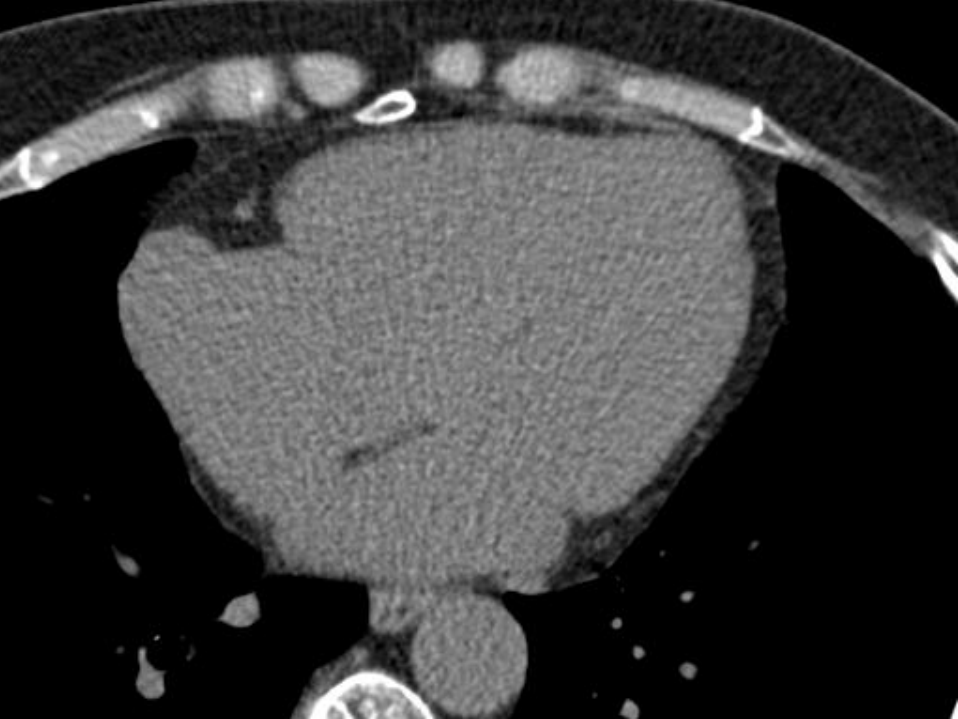
4CH



SA



precontrast



2CH



4CH



SA



# Answer

Diagnosis pseudomass by nonopacified blood in the RA

## Radiologic Findings

CT findings: ECG-gated 16-slice MDCT was performed for routine check-up. CT showed a 4cm sized well defined low attenuated mass in the RA. We suggested a true cardiac mass, but pseudolesion by nonopacified blood could not be excluded. To exclude nonopacified blood, we obtained 3 min delayed CT images again. On delayed image, there was no demonstrable mass in the RA. And on following echocardiogram (not included), there was also no detectable mass in the RA. So we concluded that the previous mass in the RA was pseudomass by nonopacified blood.

# Answer

## Brief Review

Review (by Whal Lee, MD, Resident of Seoul national university hospital)

Pseudomass by nonopacified blood

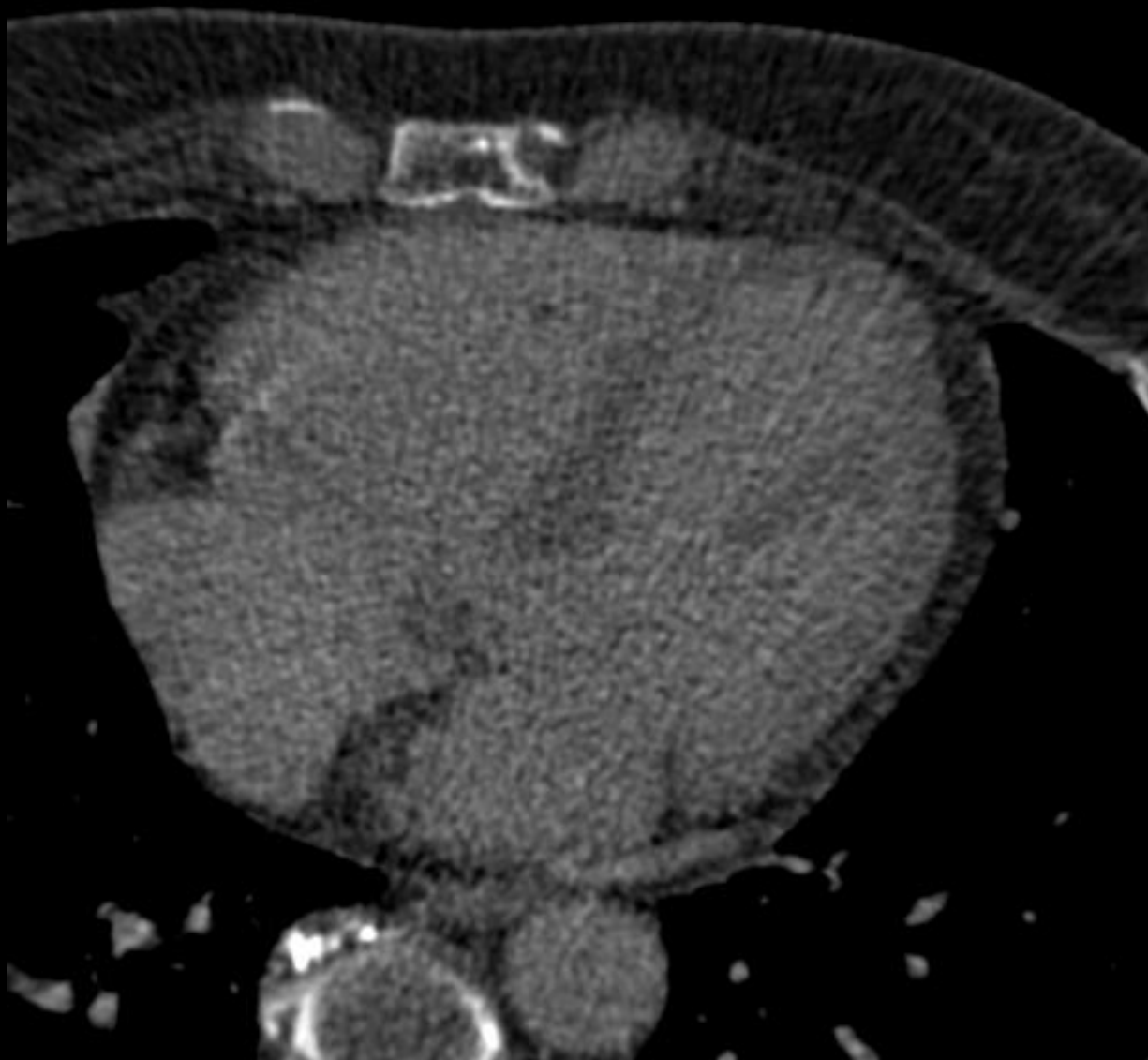
Nonopacified blood is normally found on cardiac CT, mostly differentiated from true cardiac lesion easily. But rarely nonopacified blood can mimic cardiac mass. With more popularity of MDCT and decreased rotation time that chance may increase. To exclude the possibility of the pseudomass by nonopacified blood, additional delayed CT scan or echocardiography can be performed.

# Answer

## References

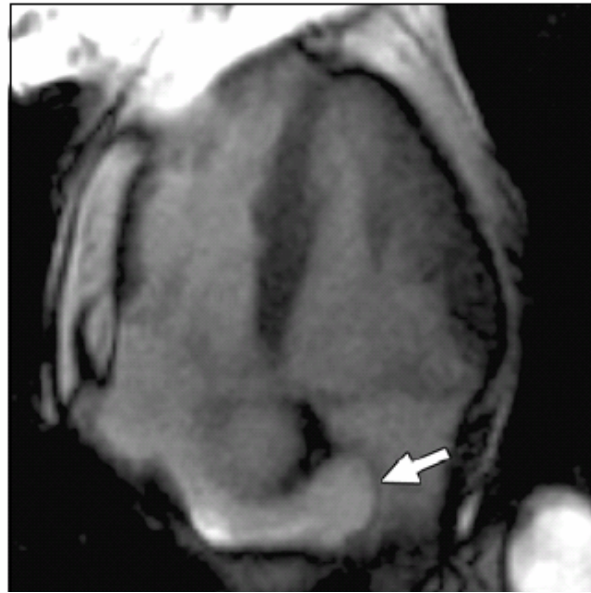
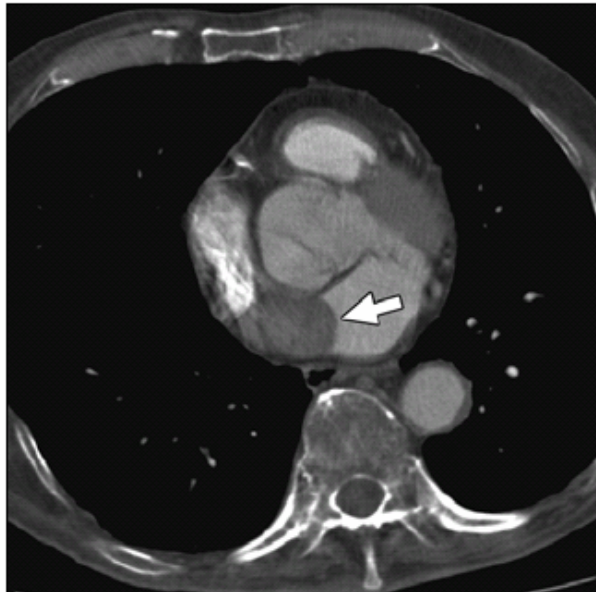
References :

1. Dodd JD, Aquino SL, Holmvang G, et al. Cardiac septal aneurysm mimicking pseudomass: appearance on ECG-gated cardiac MRI and MDCT. AJR 2007 Jun; 188(6):W550-3



3 min delayed image

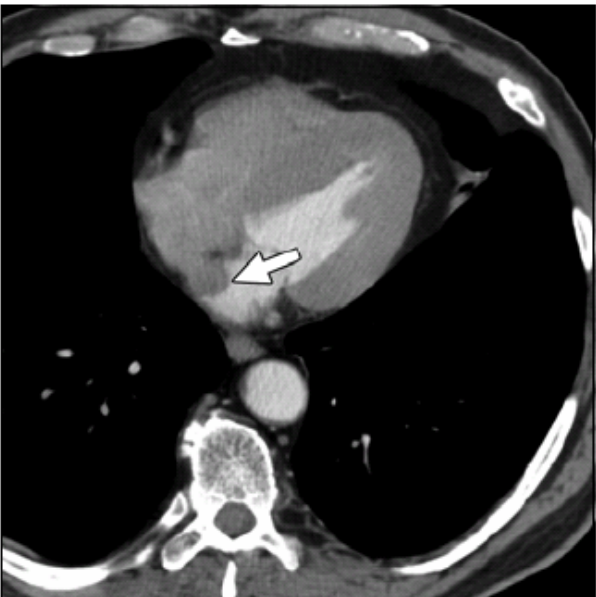
# Cardiac Septal Aneurysm Mimicking Pseudomass: Appearance on ECG-Gated Cardiac MRI and MDCT



**Fig. 1**—88-year-old man with history of penile carcinoma. See also Figure S1C, cine loop, in supplemental data.

**A**, Nongated routine contrast-enhanced axial chest CT scan shows smooth mass (*arrow*) suspected of being left atrial tumor.

**B**, Cardiac bright-blood steady-state free precession MR image in four-chamber view shows thin membrane (*arrow*) consistent with interatrial septal aneurysm filled with nonopacified blood and corresponding exactly to pseudomass seen on nongated chest CT.



**Fig. 2**—74-year-old man with bladder cancer. See also Figure S2C, cine loop, in supplemental data.

**A**, Staging nongated contrast-enhanced chest CT scan shows mass (*arrow*) suspected of being tumor in left atrium.

**B**, Cardiac MR image obtained with steady-state free precession sequences shows thin membrane (*arrow*) consistent with interatrial septum filled with blood and bowing 12 mm into left atrium.