

Cardialis MR és CT gyakorlat

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Technikai kihívások

- Cardialis mozgások
- Légző mozgások
- Időbeli felbontás
- Térbeli felbontás

Szív MR technika

- Légző mozgások
 - Átlagolás
 - Légzés kompenzáció
 - Légzés visszatartás
 - Navigátor
 - Valós idejű képképzés
- Cardialis mozgás
 - Pulzus-szinkronizáció
 - EKG-szinkronizáció
 - Vektor-EKG
 - Önkapuzás
 - Valós idejű képképzés

Szív MR technika II.

- Térbeli és időbeli felbontás
 - Gyors szekvenciák
 - FSE
 - EPI
 - GRE
 - Hybrid GRE-EPI
 - perfúzió
 - **b-SSFP**
 - univerzális
- Kiolvasási stratégia
 - Hagyományos
 - Részleges
 - EPI
 - Spirál
 - Radiális

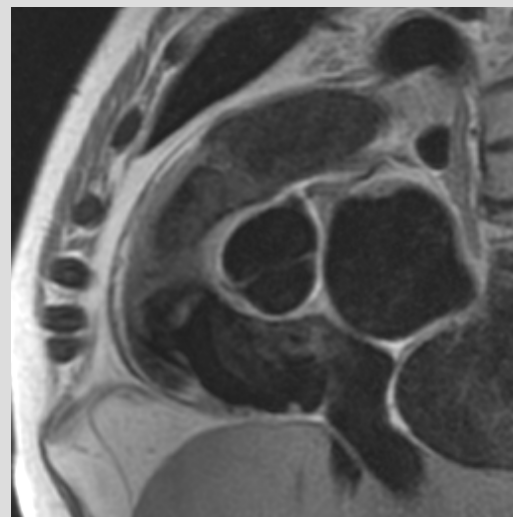
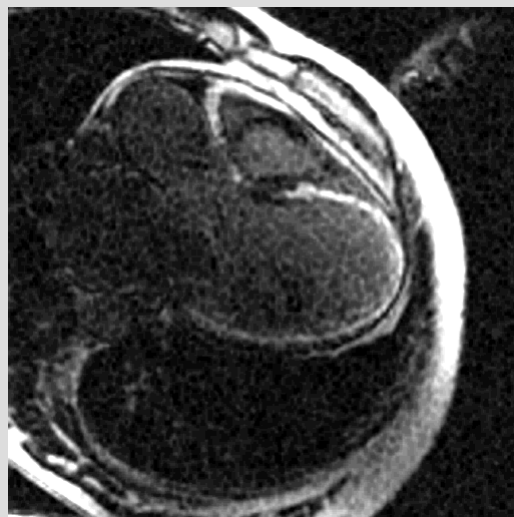
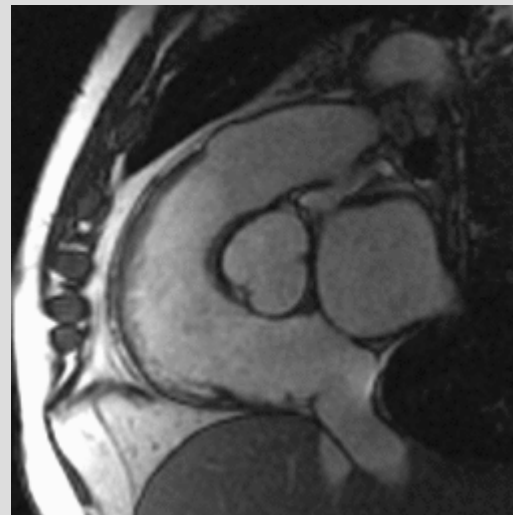
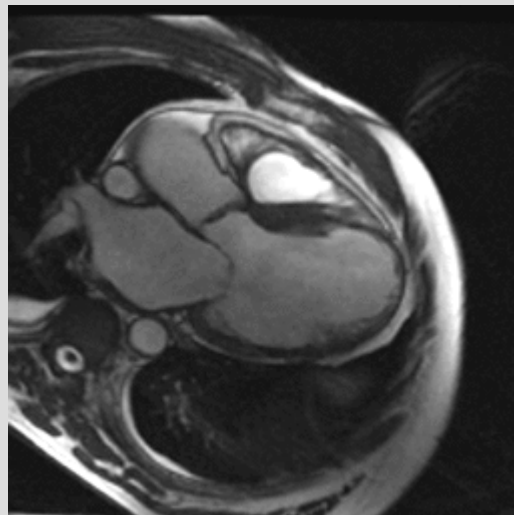
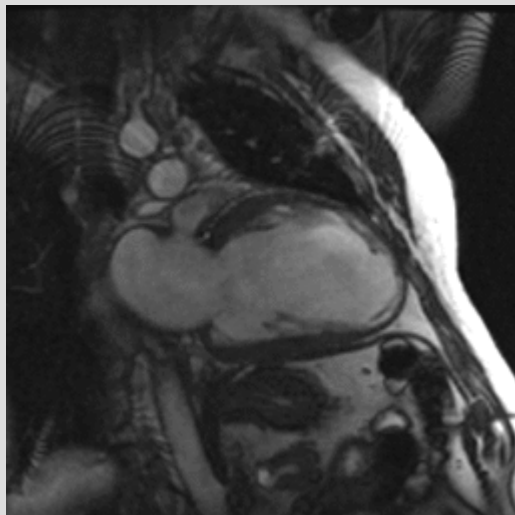
Szív MR technika

- Előgerjesztések
 - Vérelnyomás
 - Zsírelnyomás
 - Szaturáció
 - Inverzió
 - Késői halmozás
 - STIR
 - T2-előkészítés
- Speciális síkok
 - Axialis:
transzverzális
 - Kétüregi- és
négyüregi nézet
 - Bal- és jobb kamrai
kiáramlás
 - Rövid- és
hossztengelyi síkok

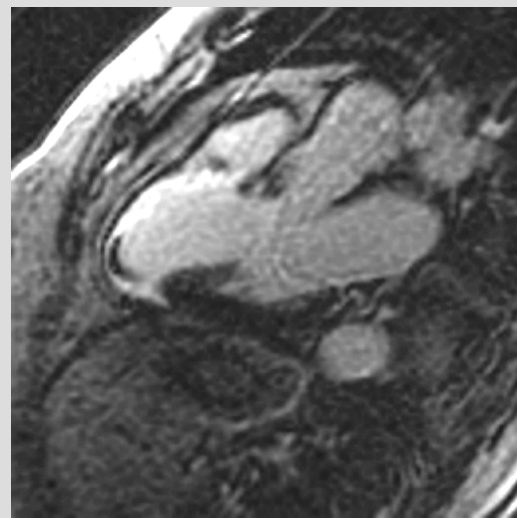
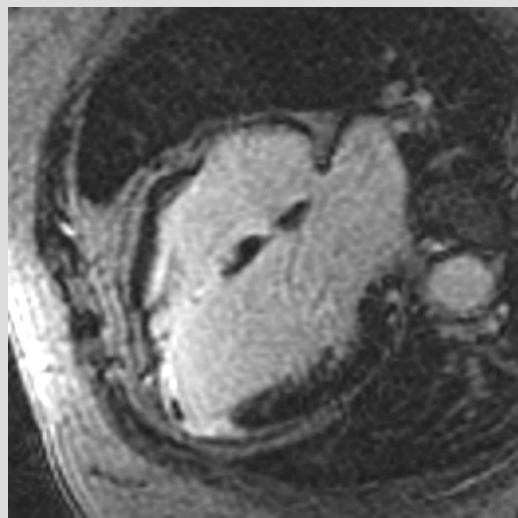
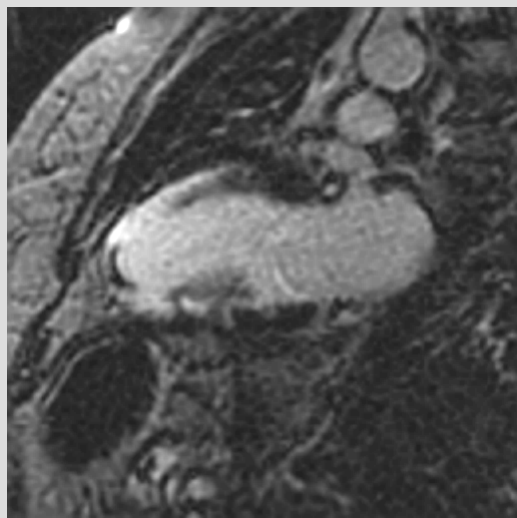
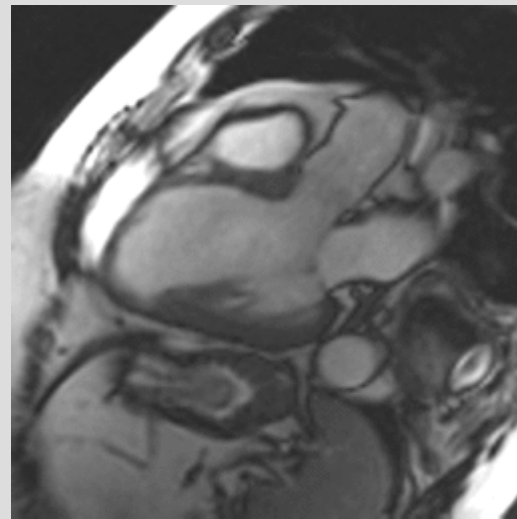
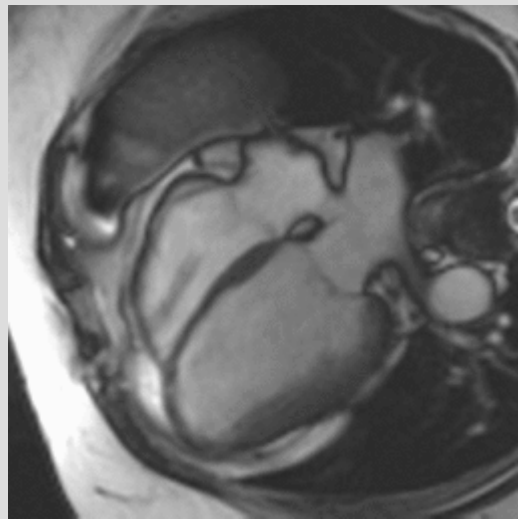
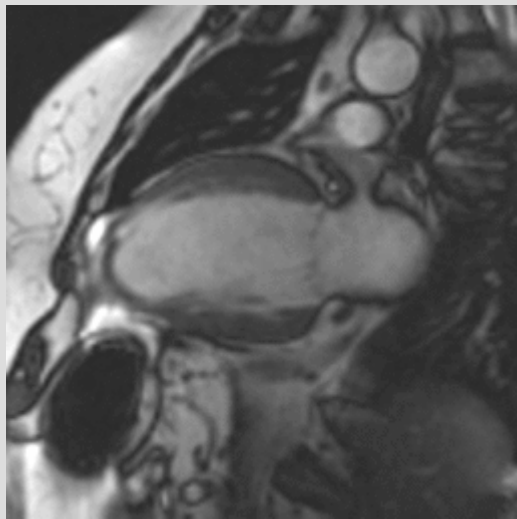
Indikációk

- Ischaemias szívbetegség
- Cardiomyopathiak
- Fejlődési rendellenesség
- Ritmuszavarok
- Gyulladásos folyamatok
- Tumoros eltérések
- Pericardium betegségei
- Billentyű betegségek
- Megválaszolatlan diagnosztikus kérdések

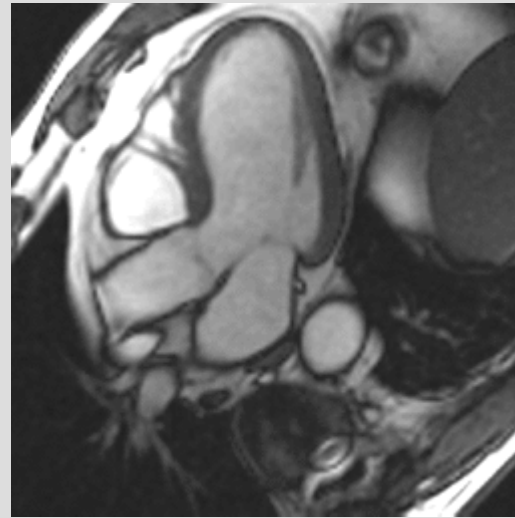
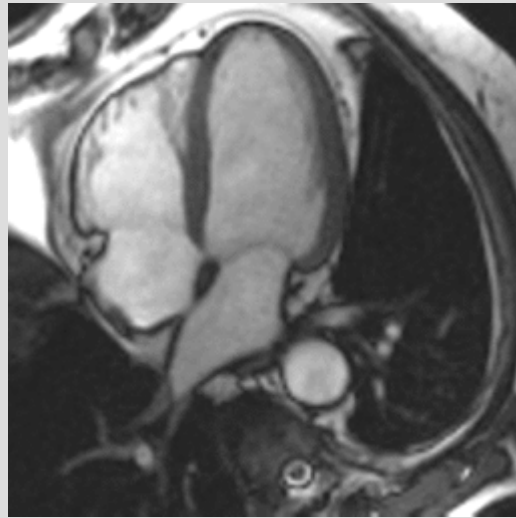
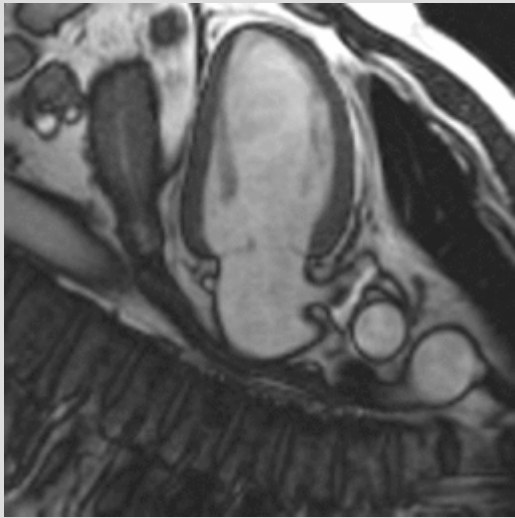
Viabilitás



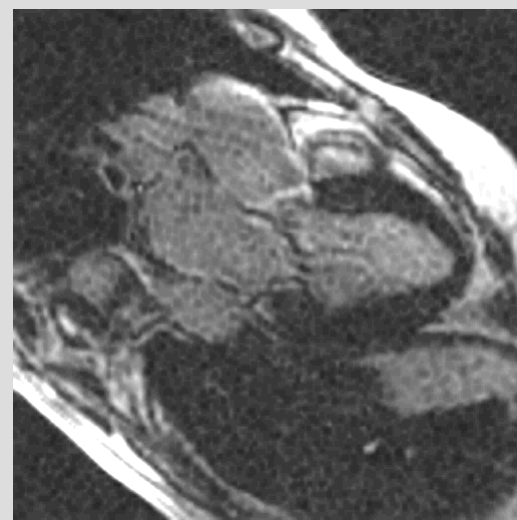
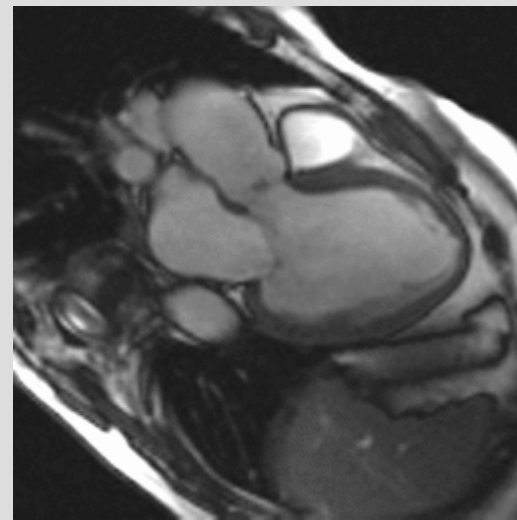
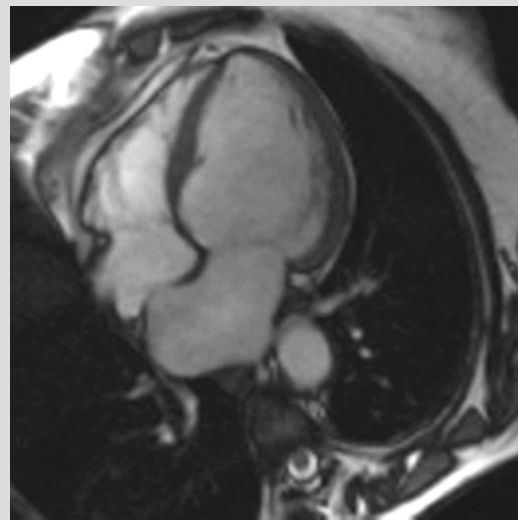
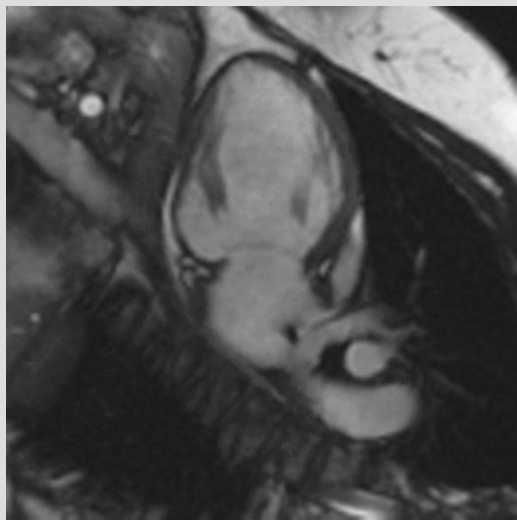
Nem viabilis, thrombus



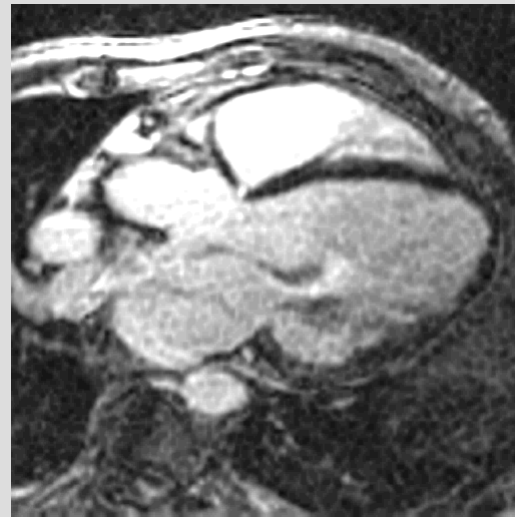
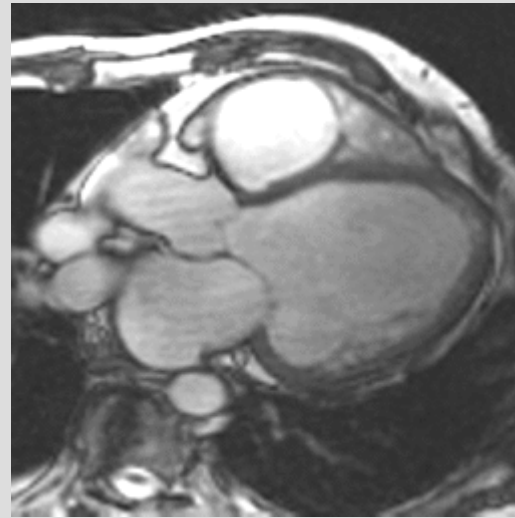
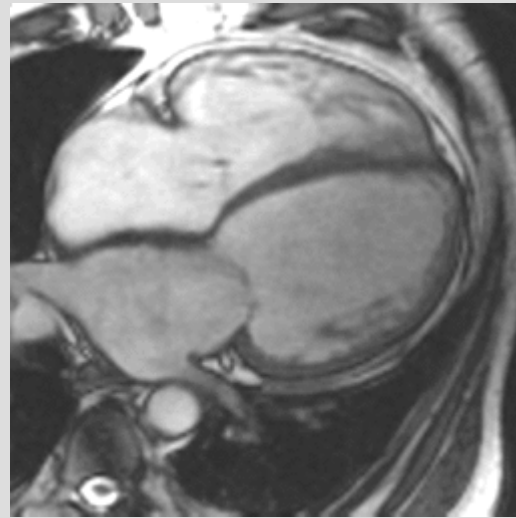
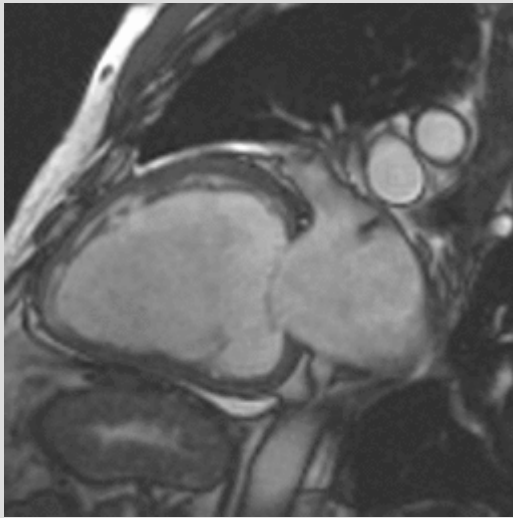
Viabilis



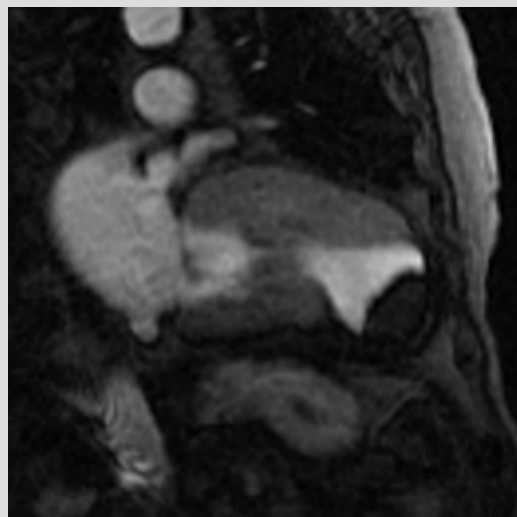
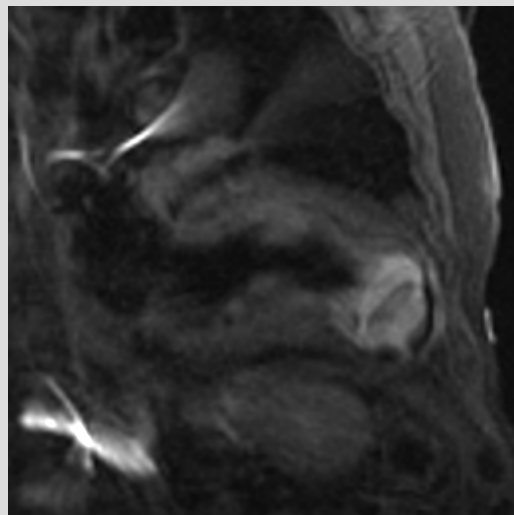
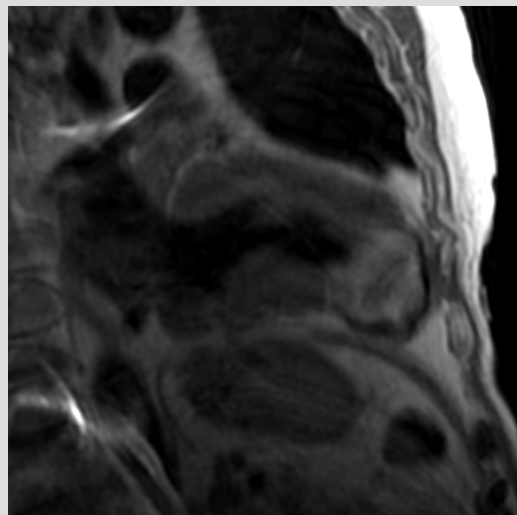
Nehéz eset



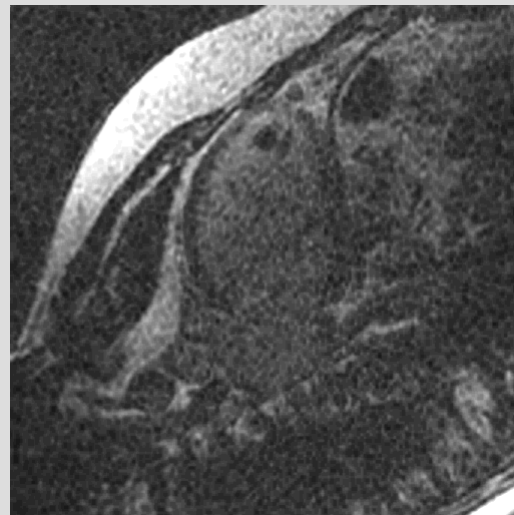
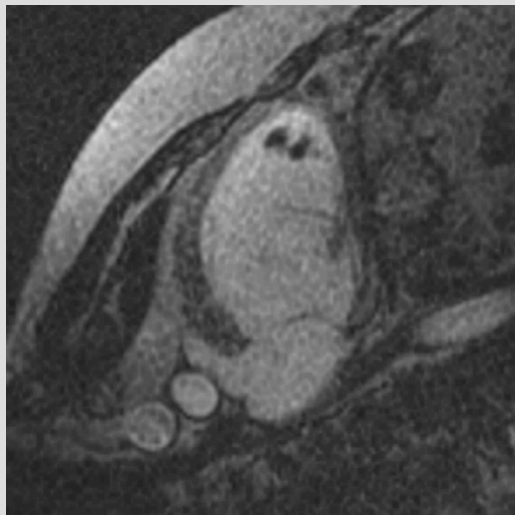
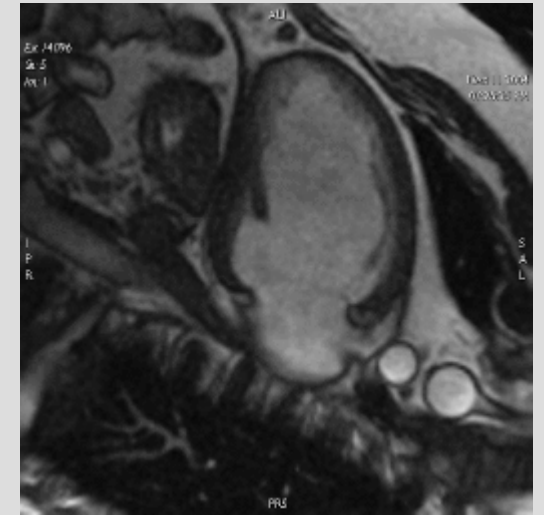
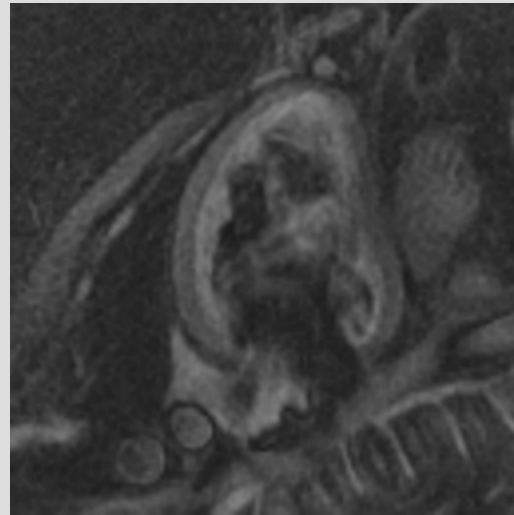
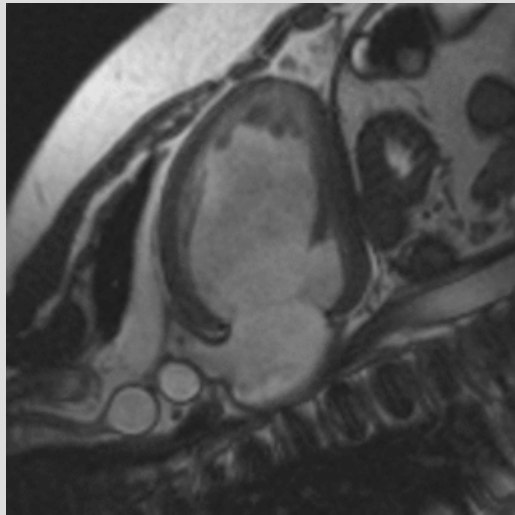
DCM



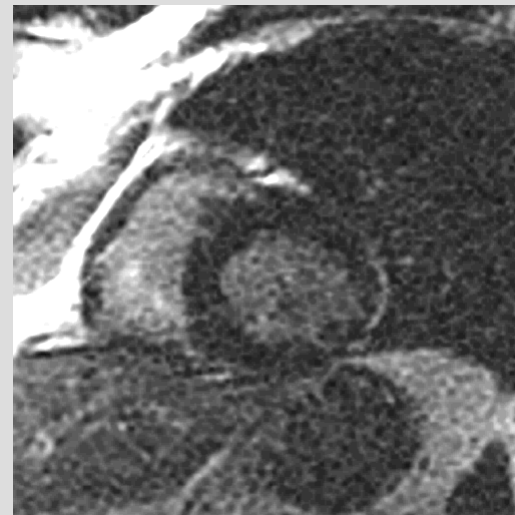
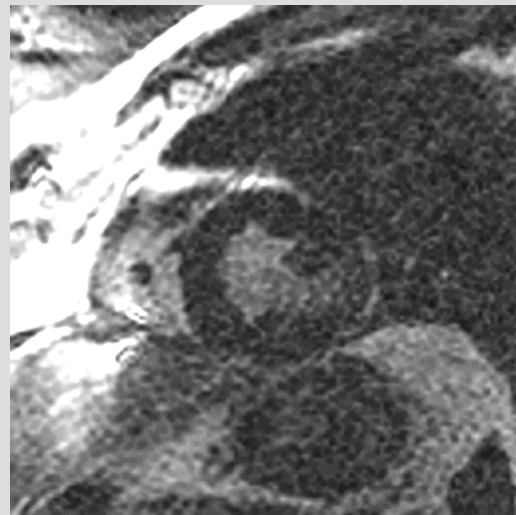
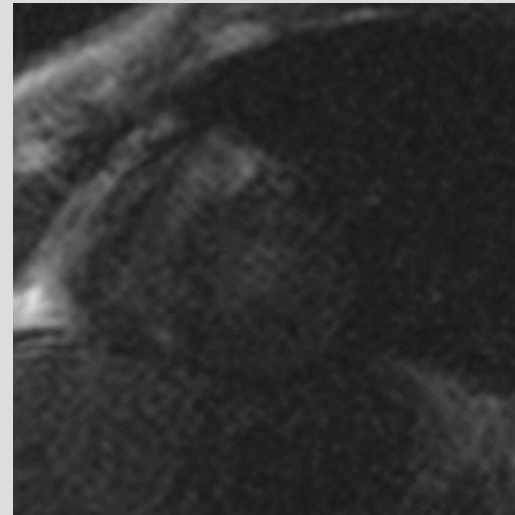
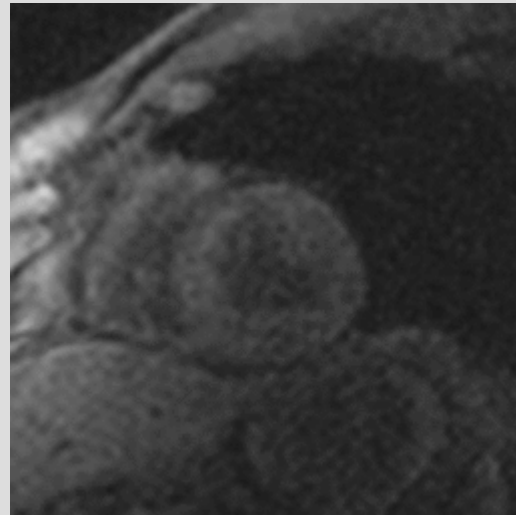
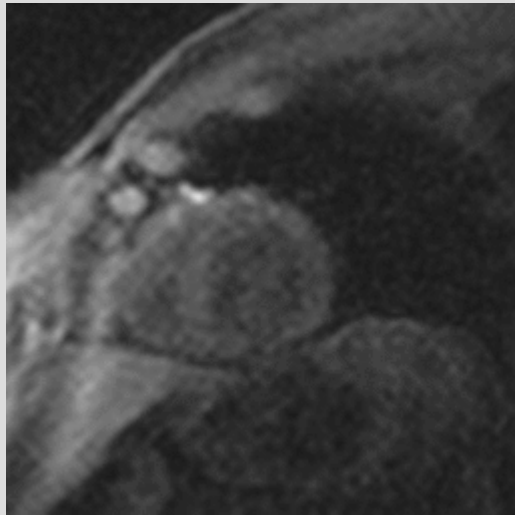
Meszes csúcsi aneurysma és thrombus



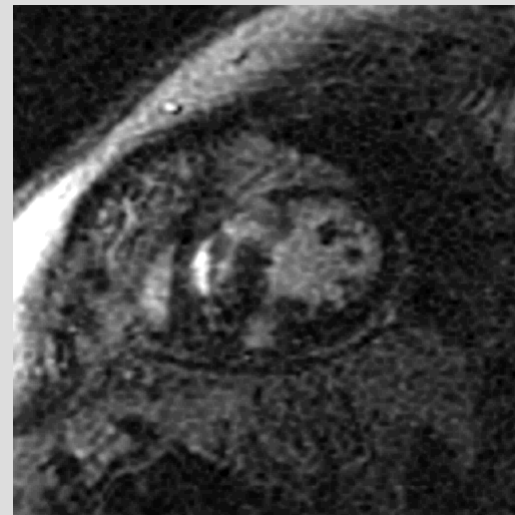
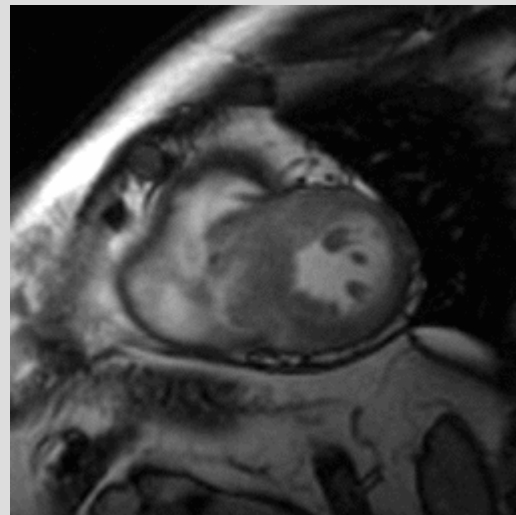
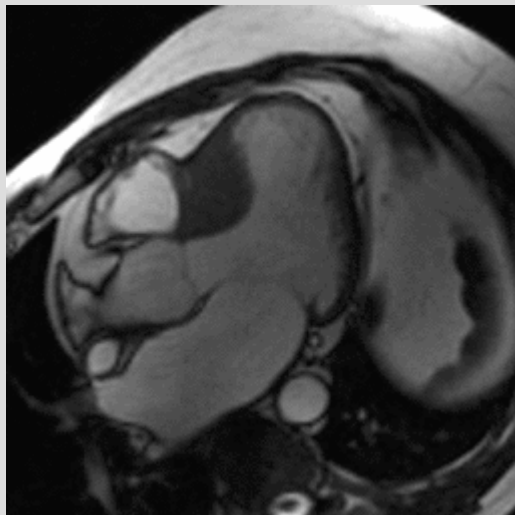
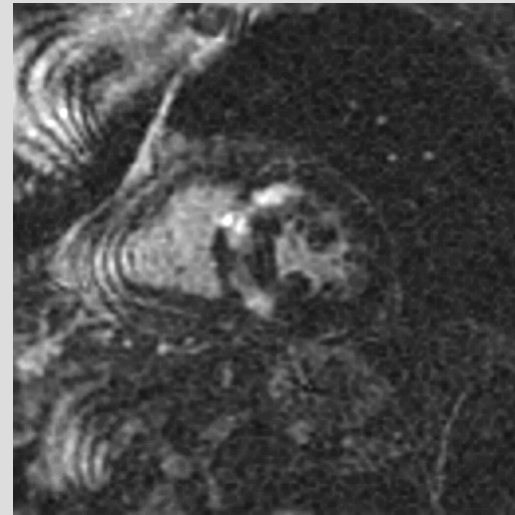
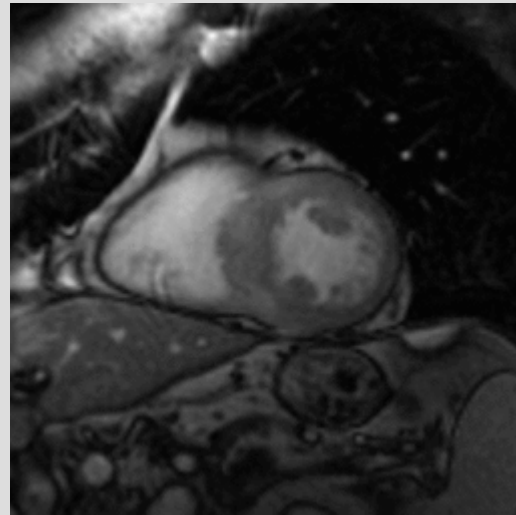
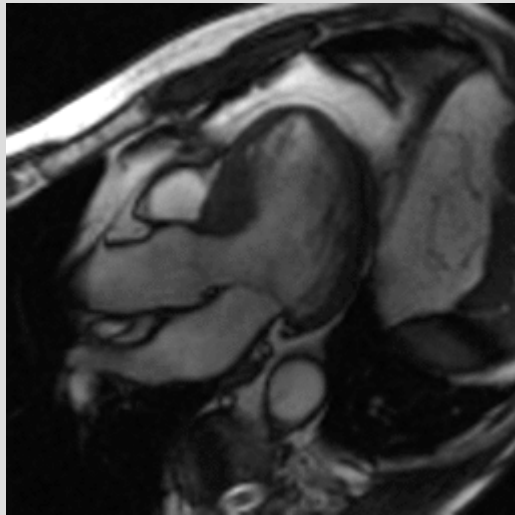
DCM, Csúcsi thrombus



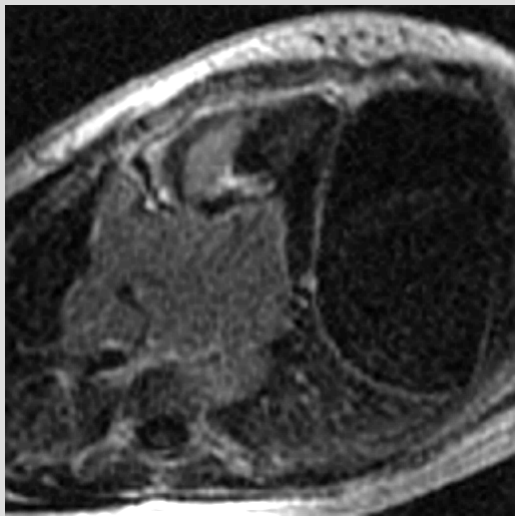
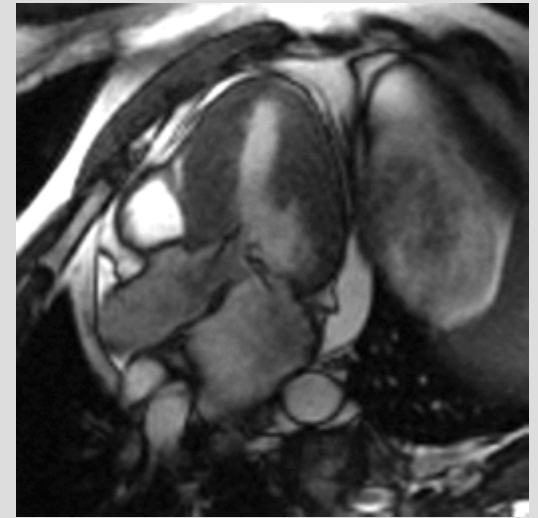
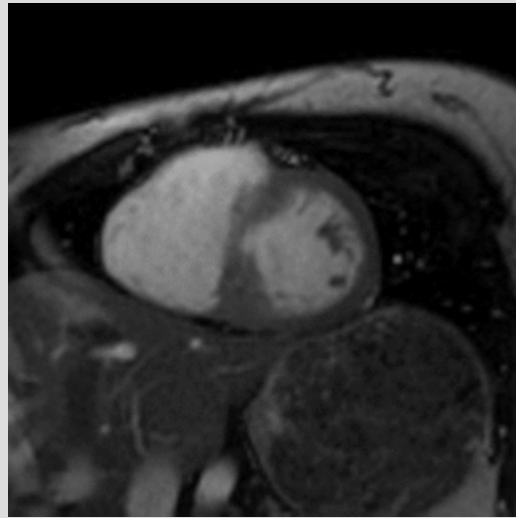
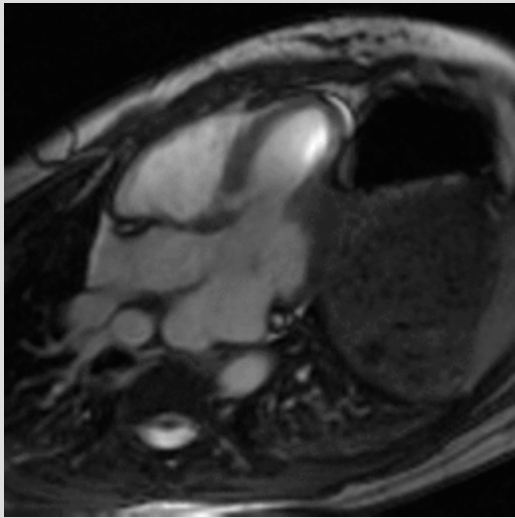
Rövid tengelyi perfúzió



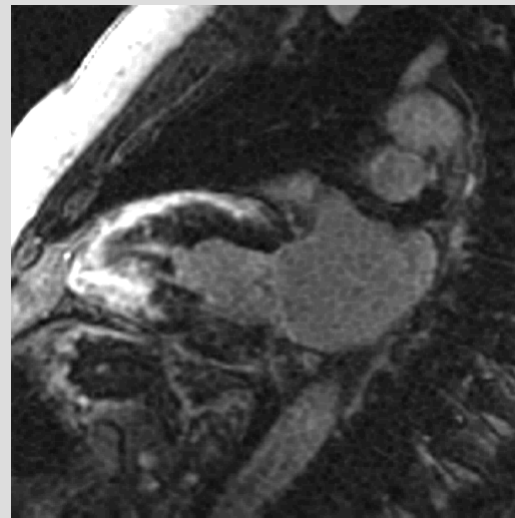
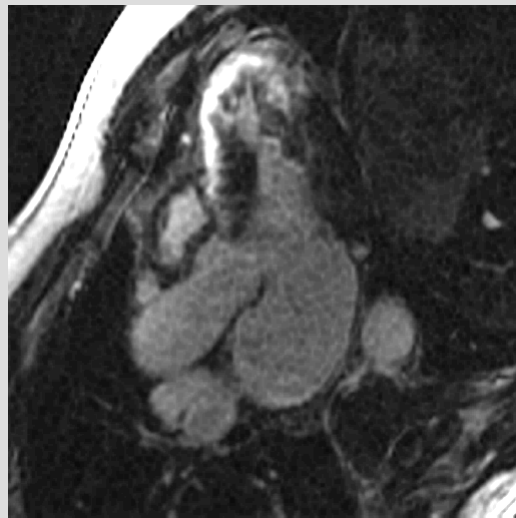
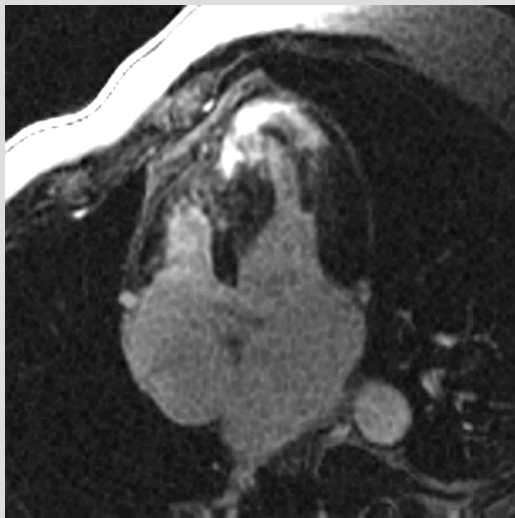
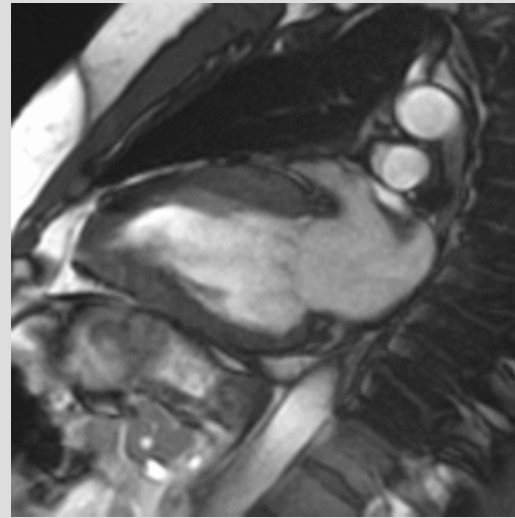
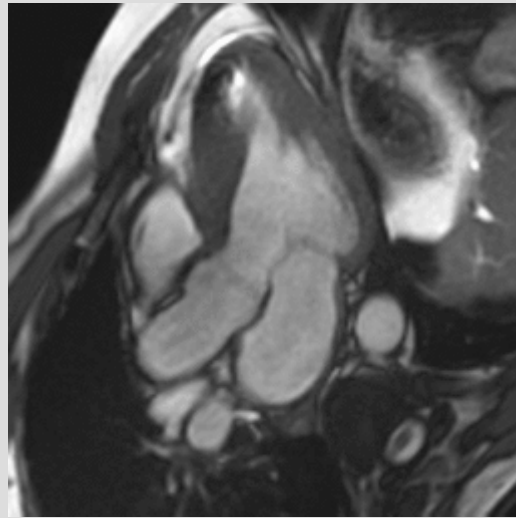
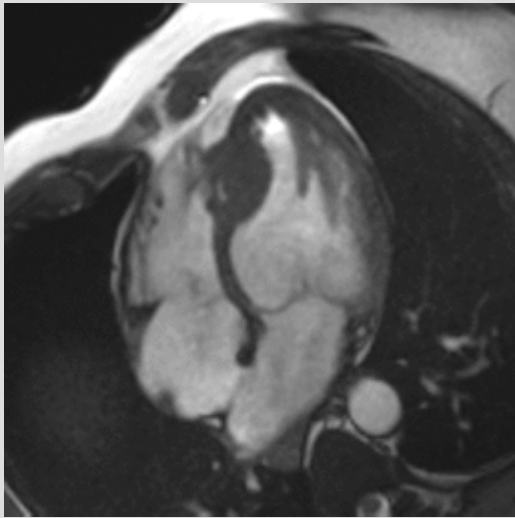
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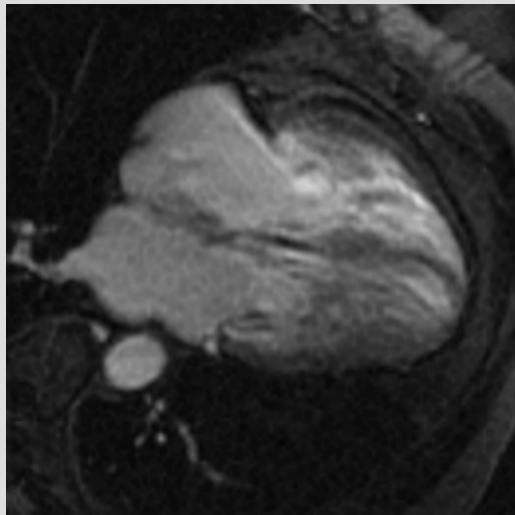
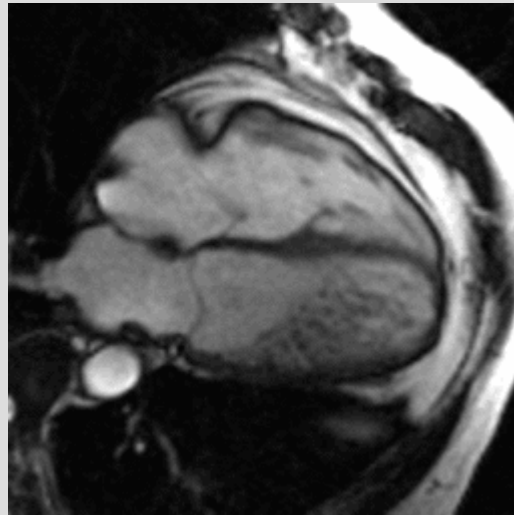
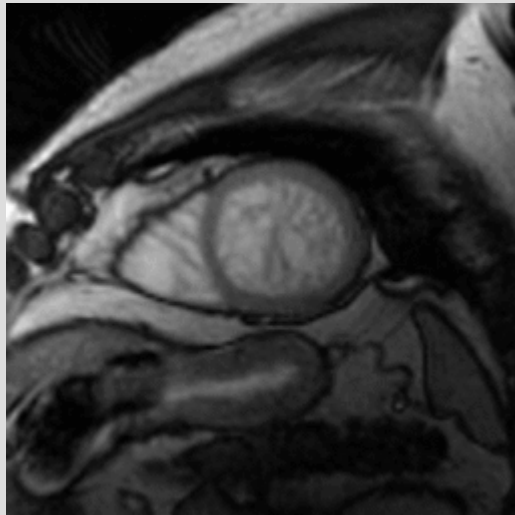
HCM: st.p.PTSMA, SAM



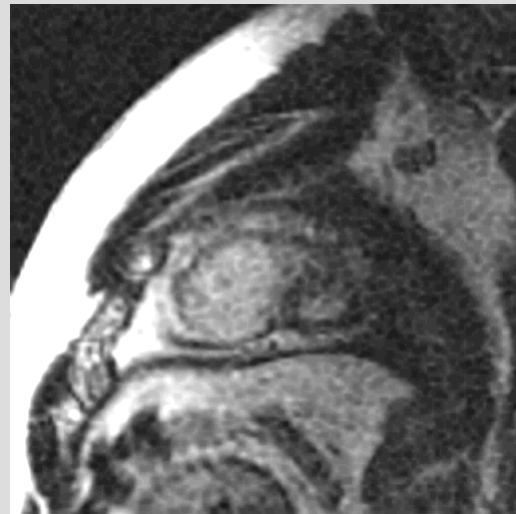
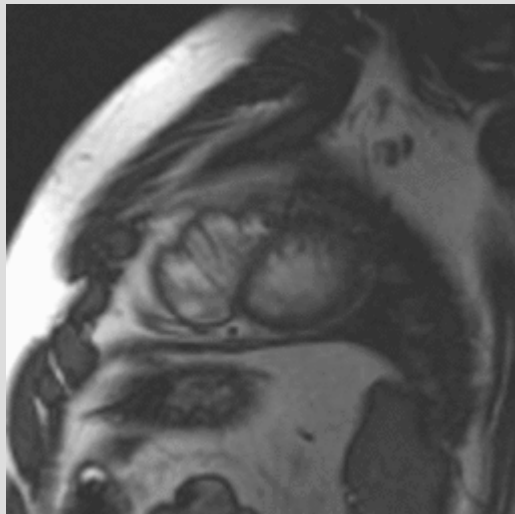
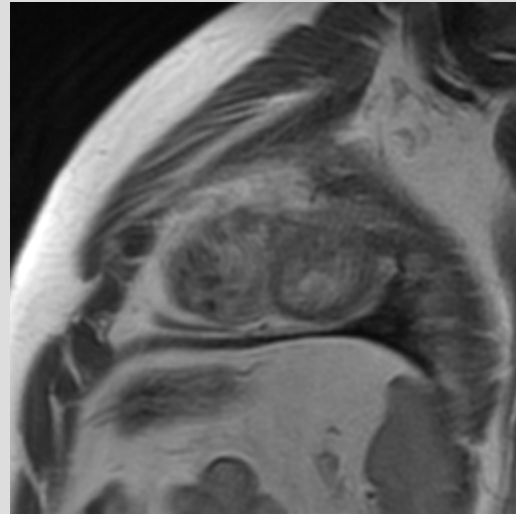
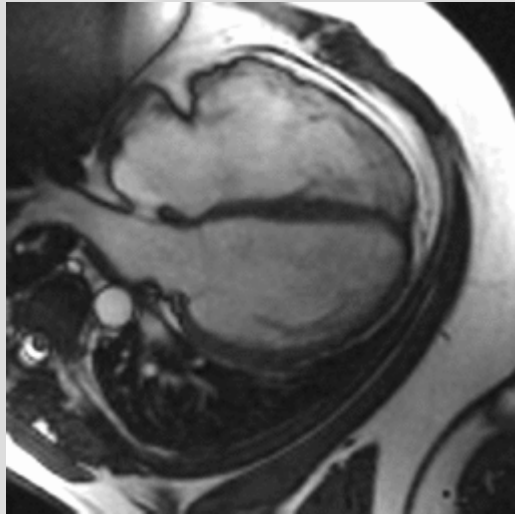
HCM



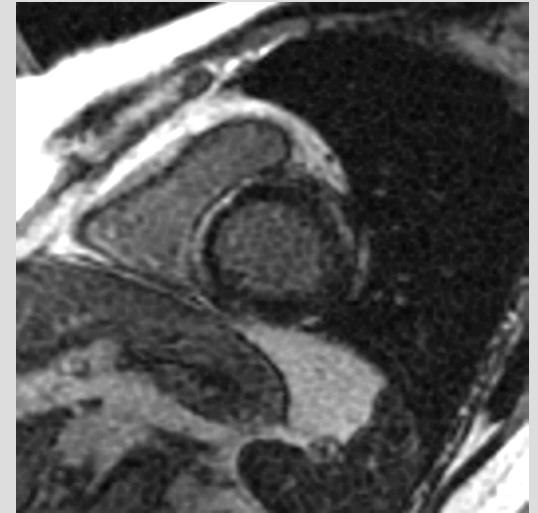
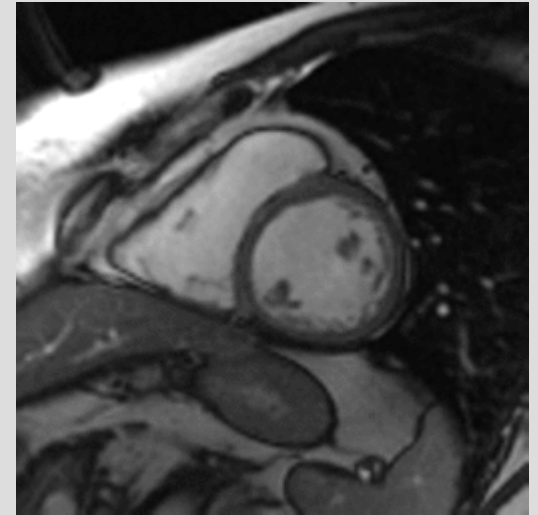
Non-compact CMP



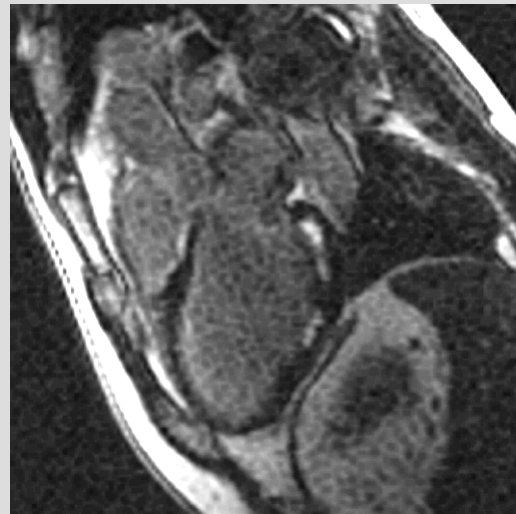
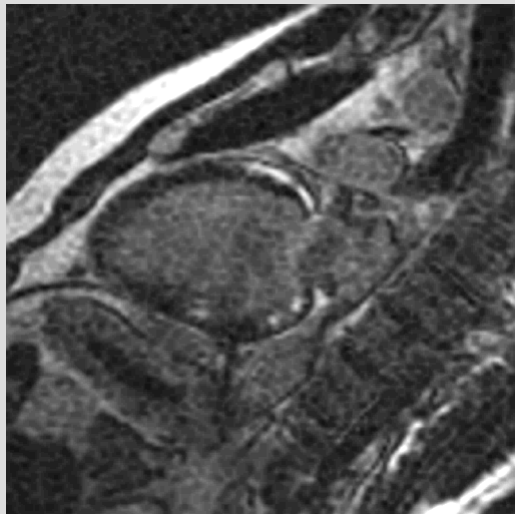
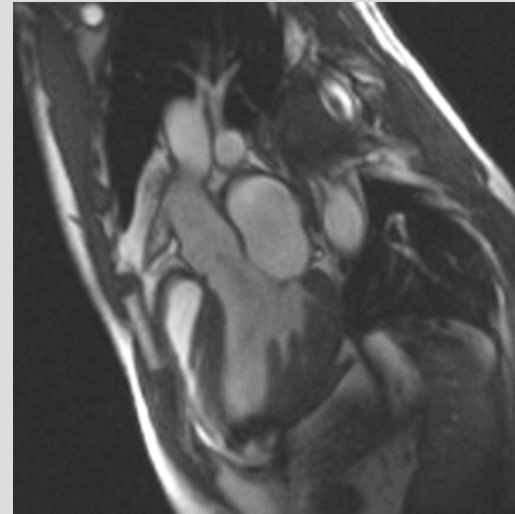
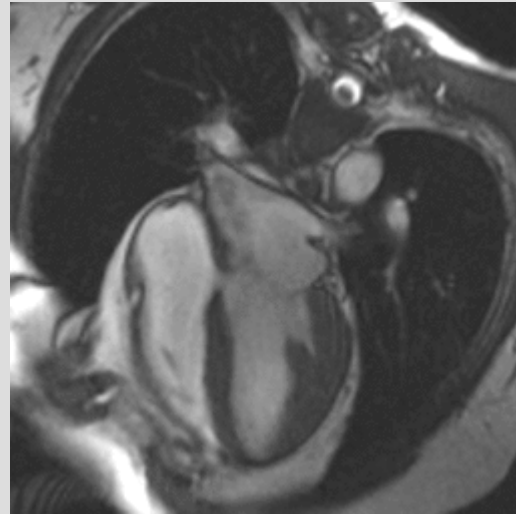
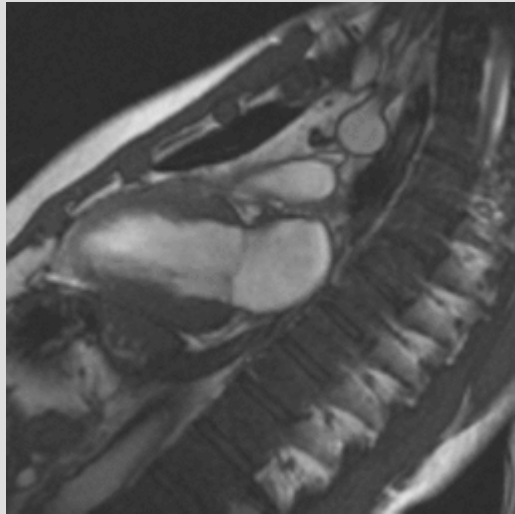
ARVD



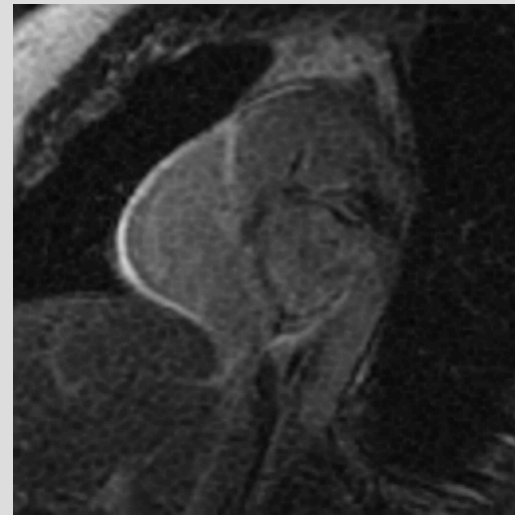
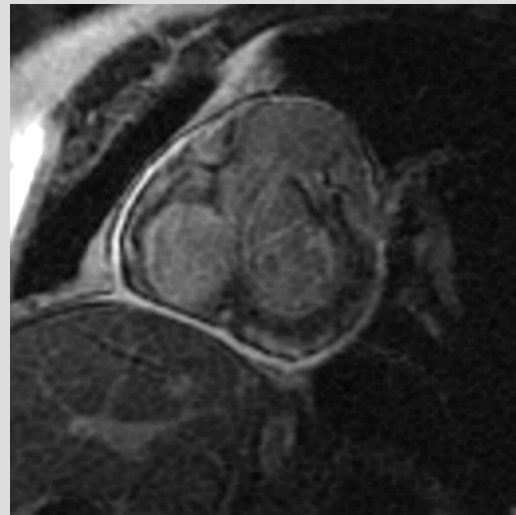
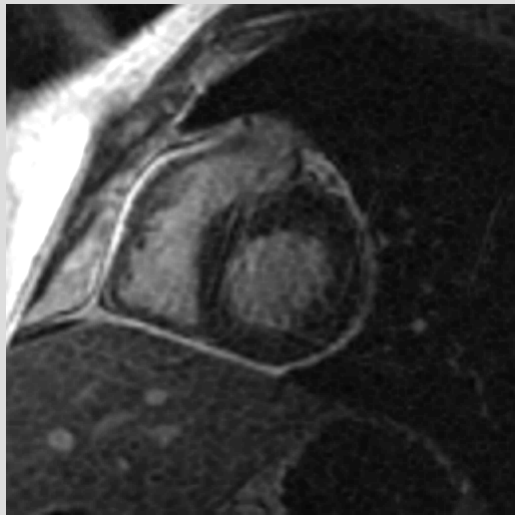
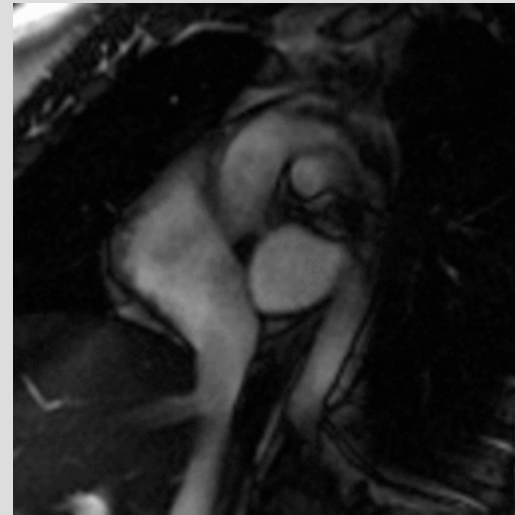
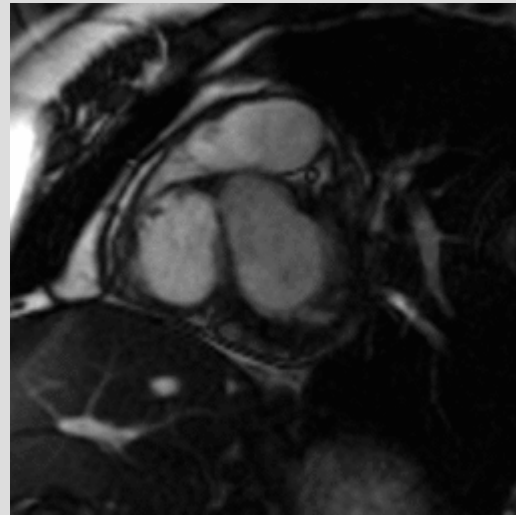
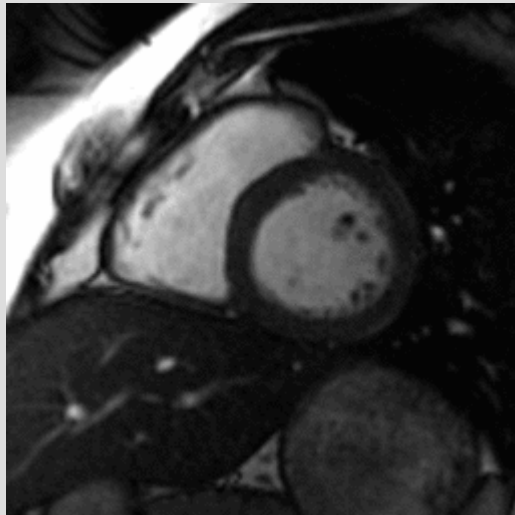
Midmyocardialis - myocarditis



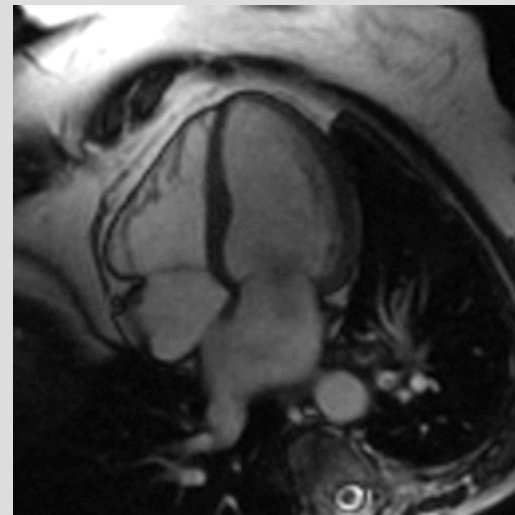
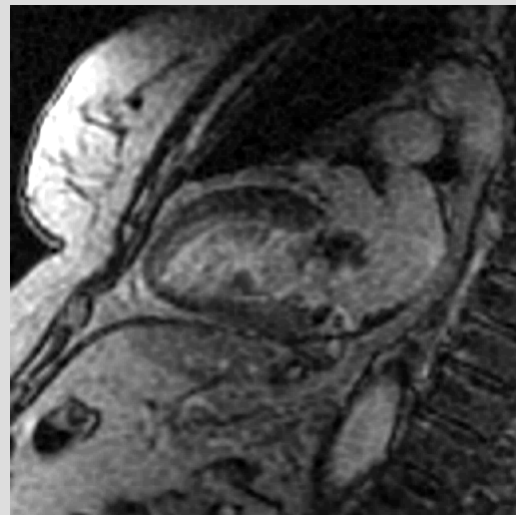
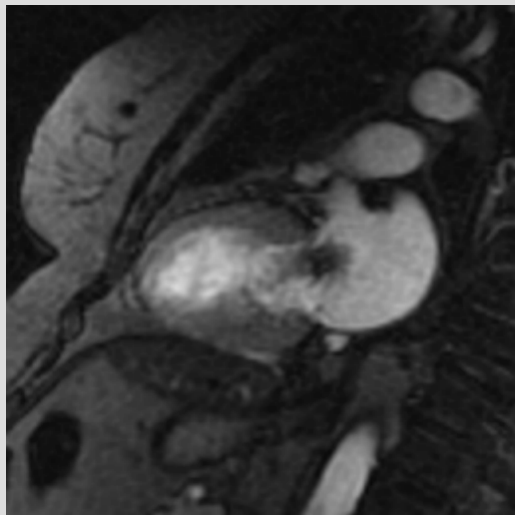
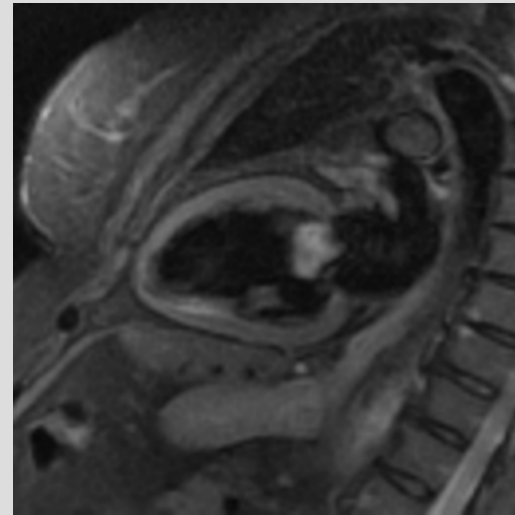
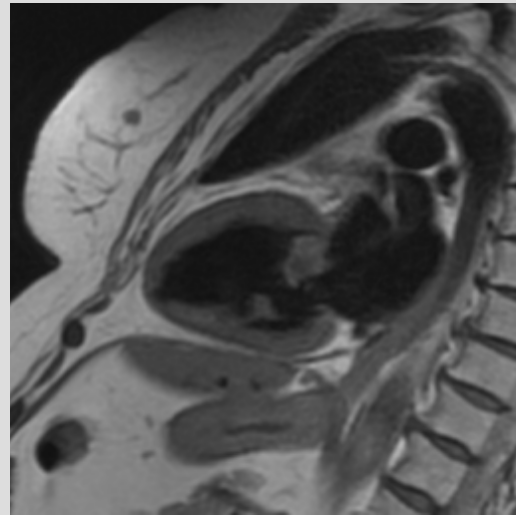
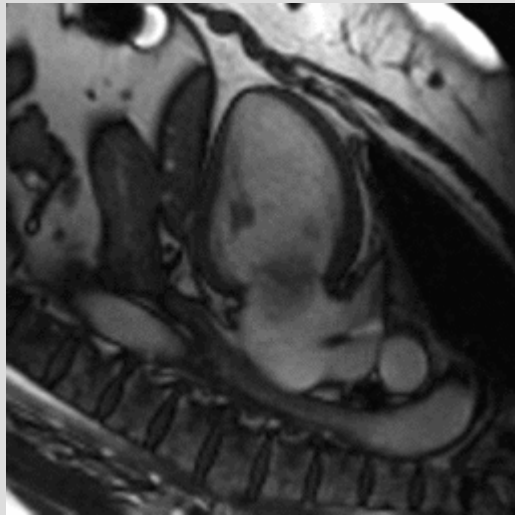
Sarcoidosis



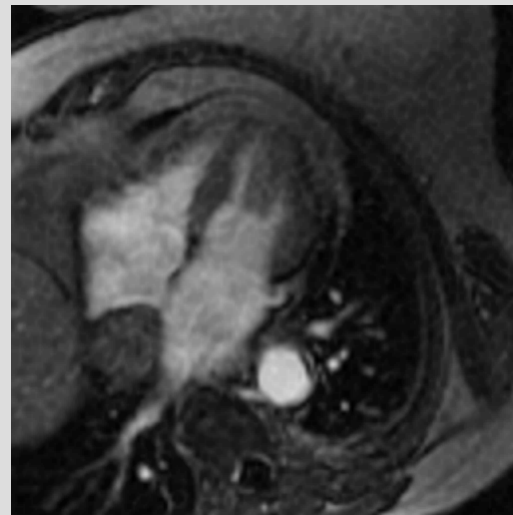
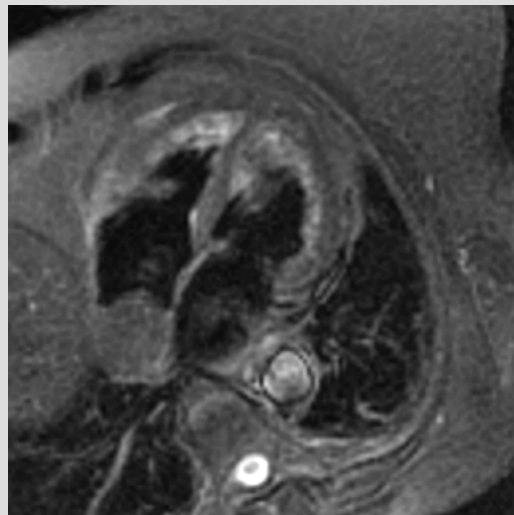
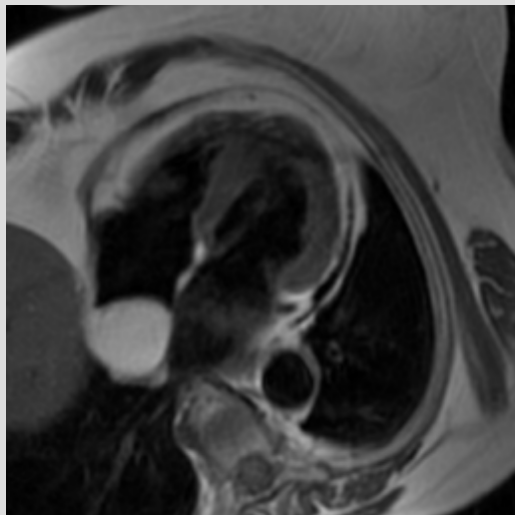
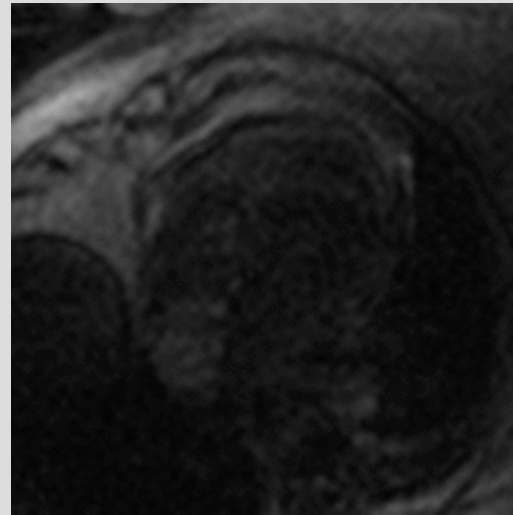
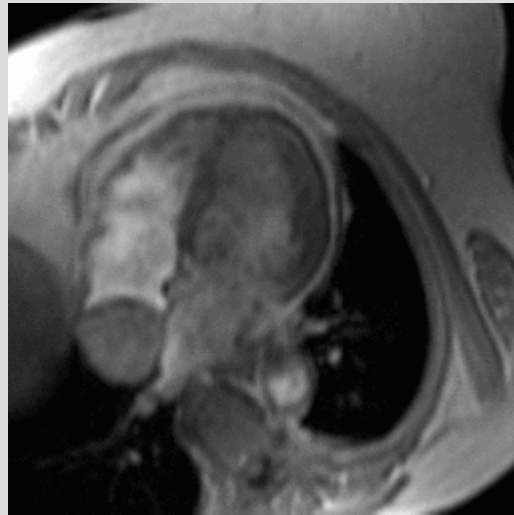
Pericarditis



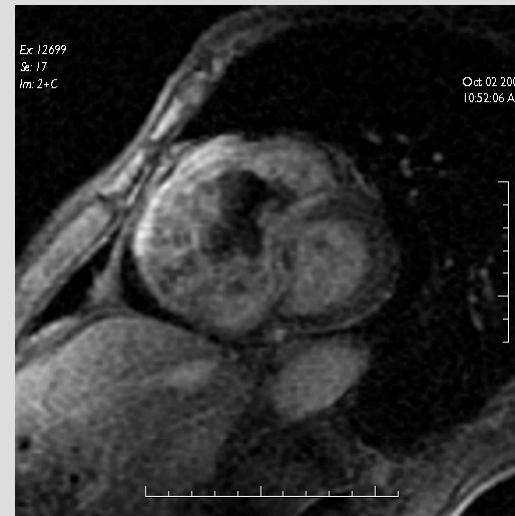
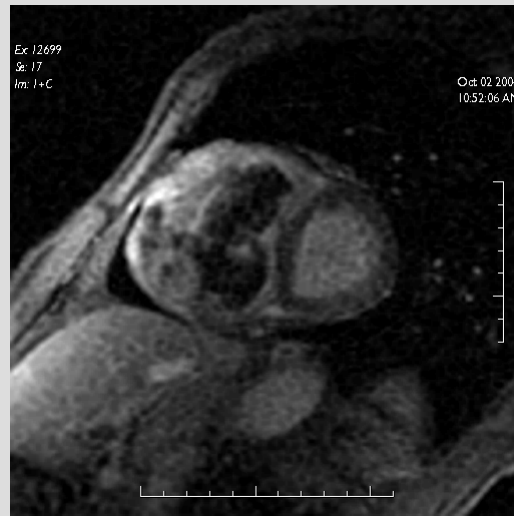
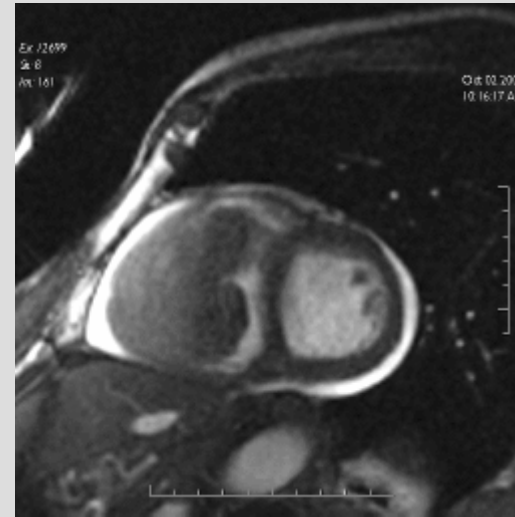
Bal pitvari myxoma



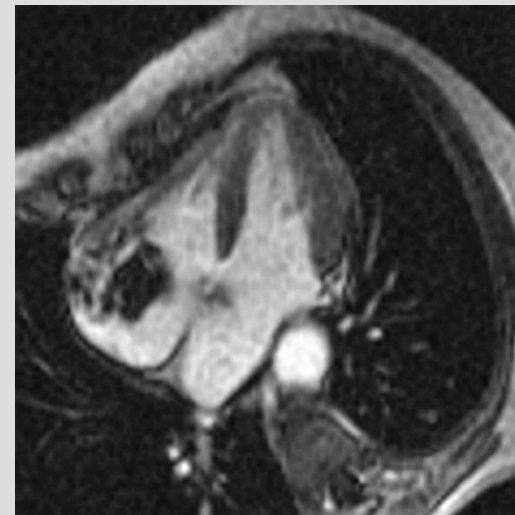
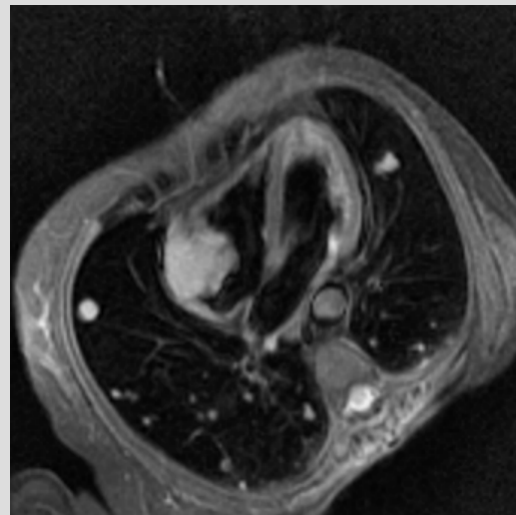
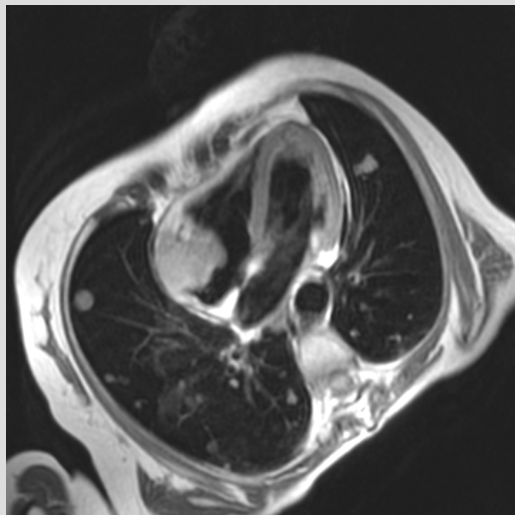
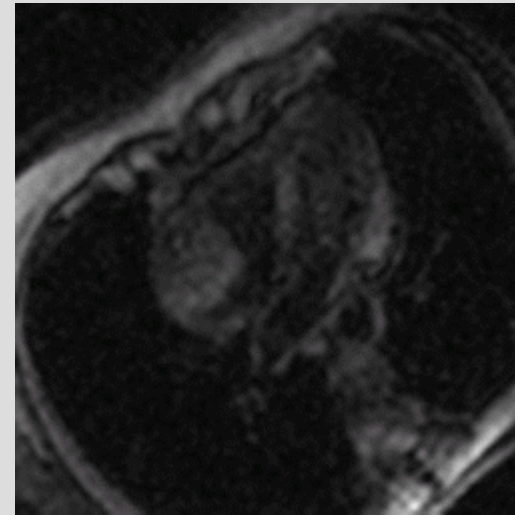
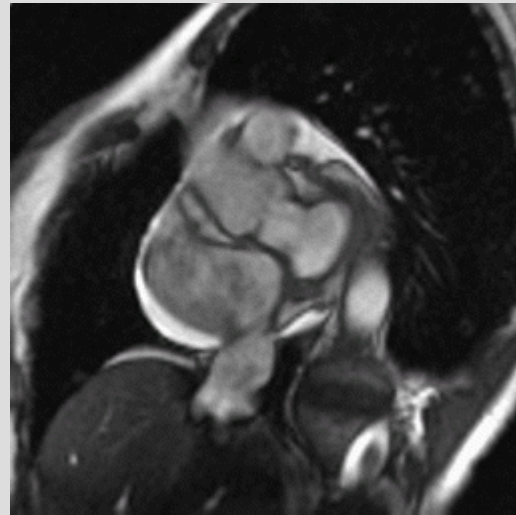
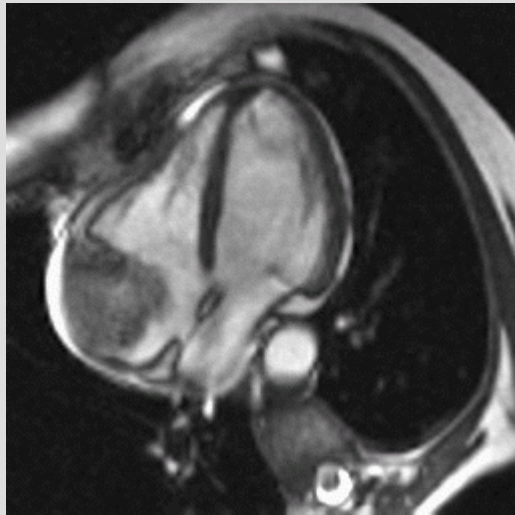
Jobb pivari lipoma



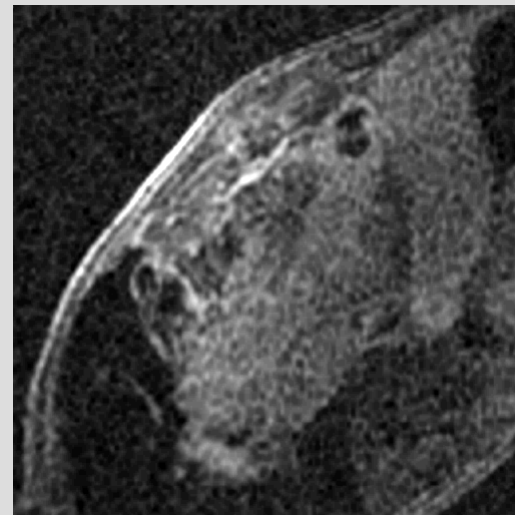
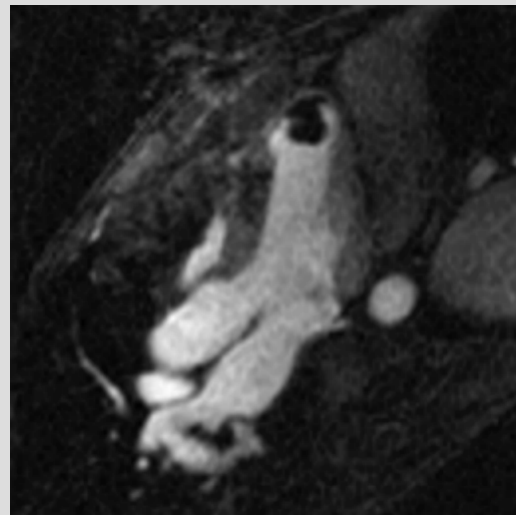
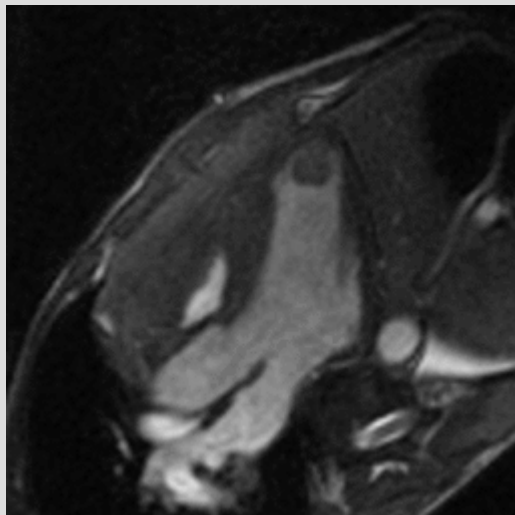
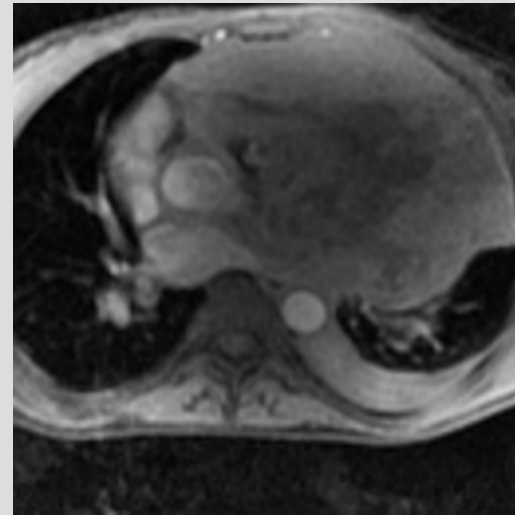
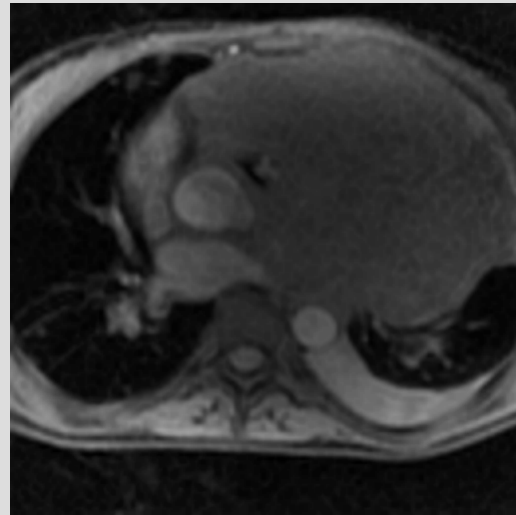
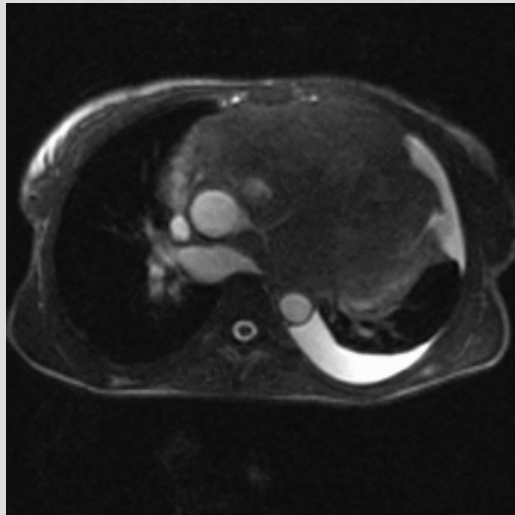
Rectum tumor meta



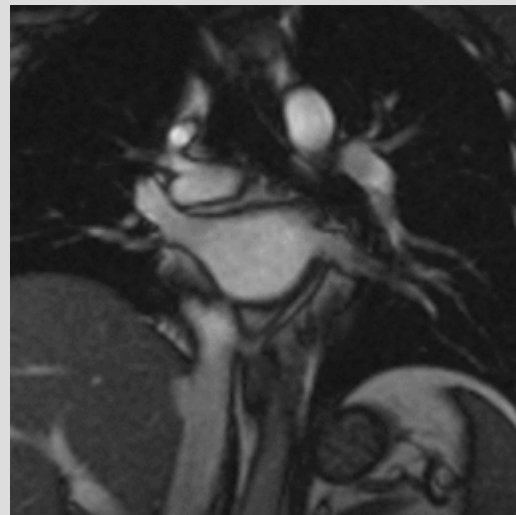
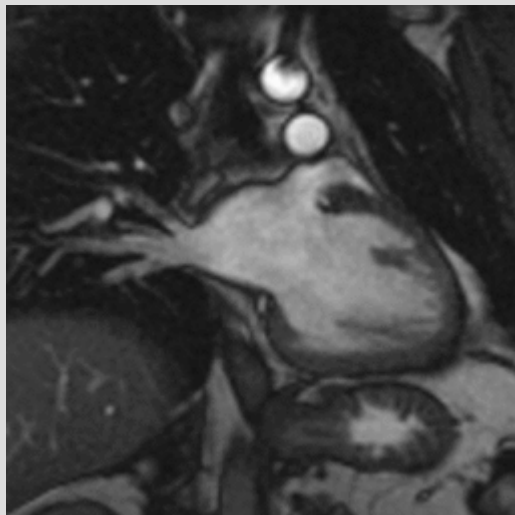
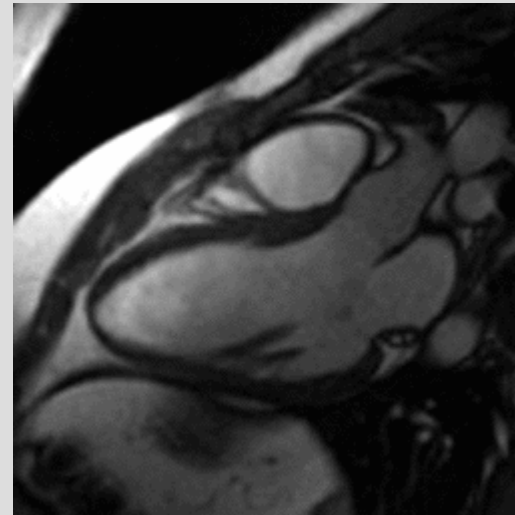
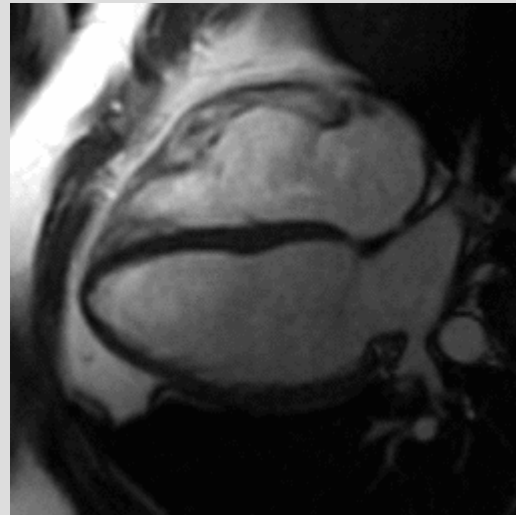
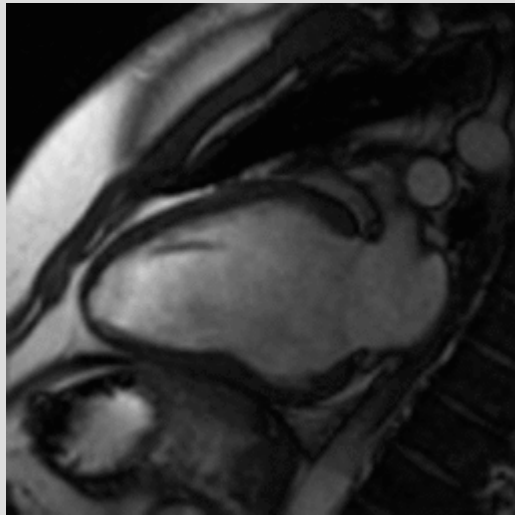
Emlő tumor meta



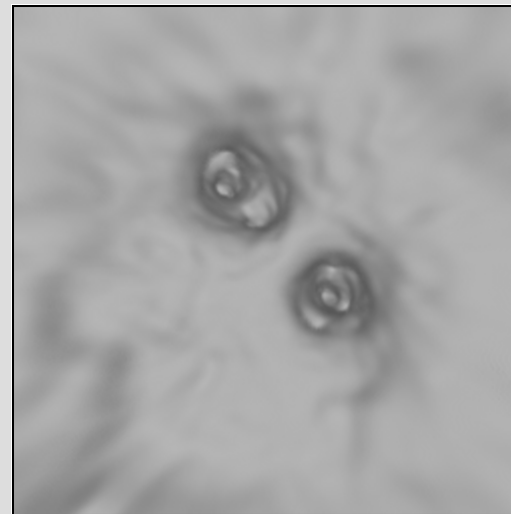
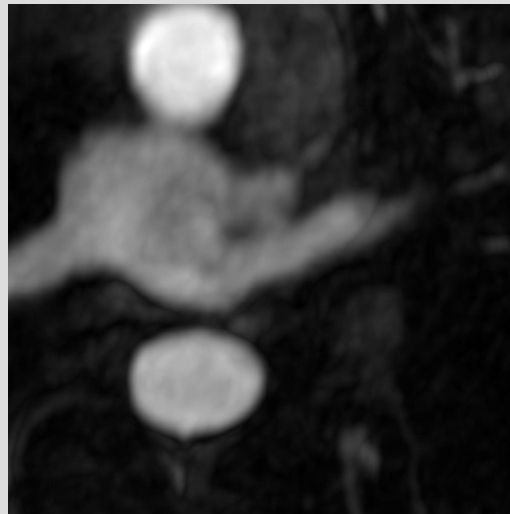
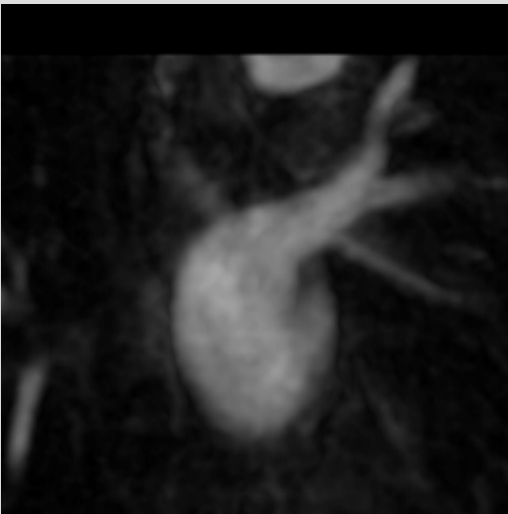
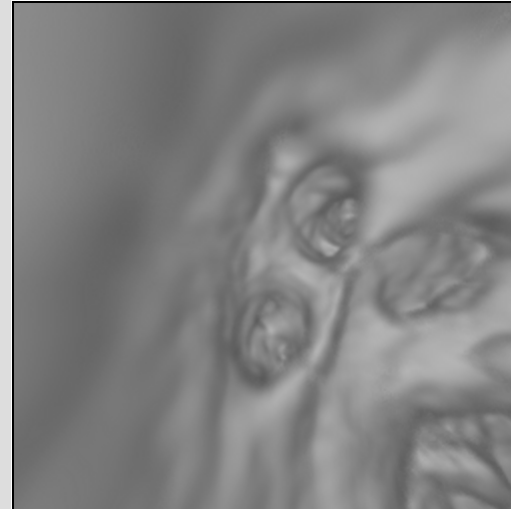
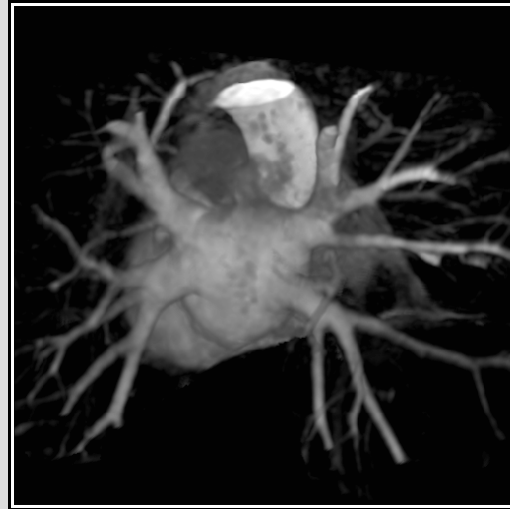
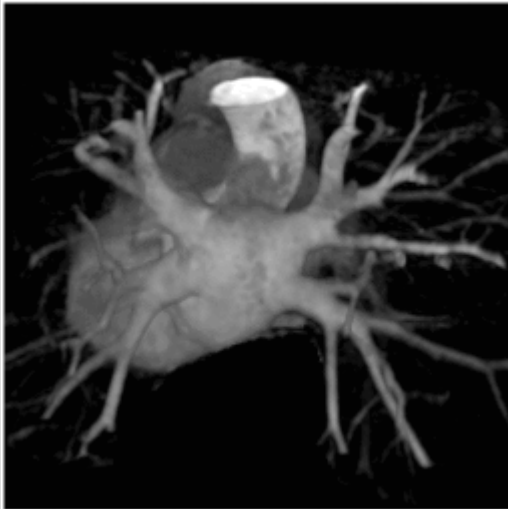
Diffúz nagysejtes NHL



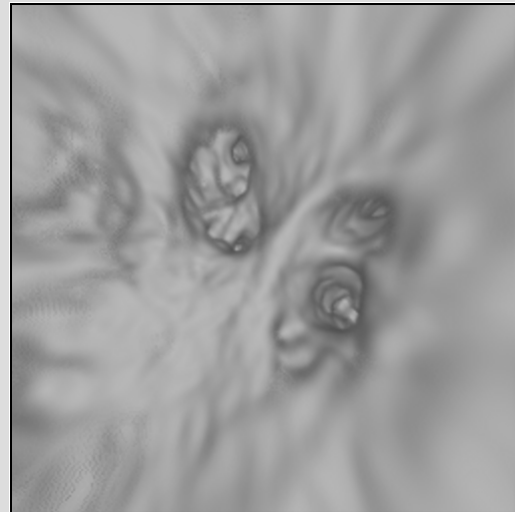
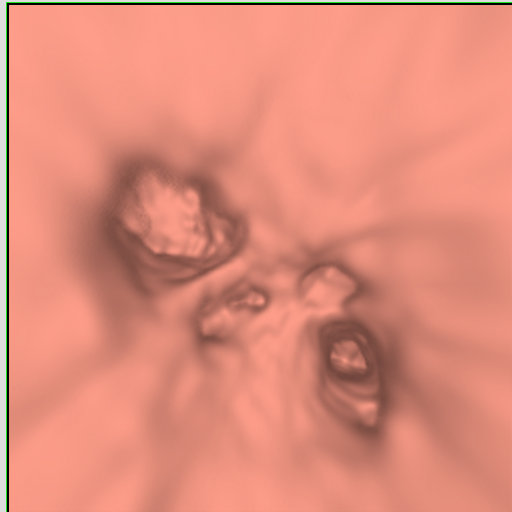
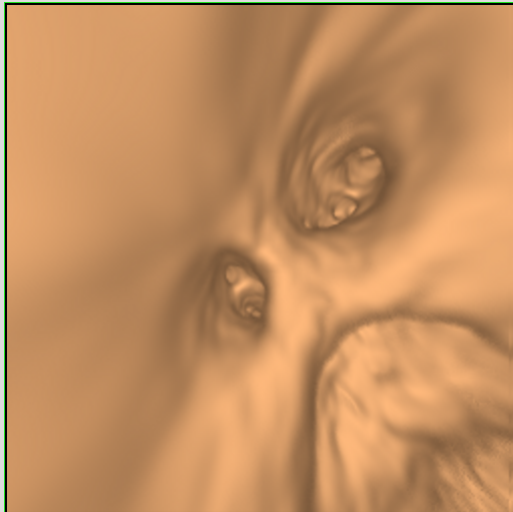
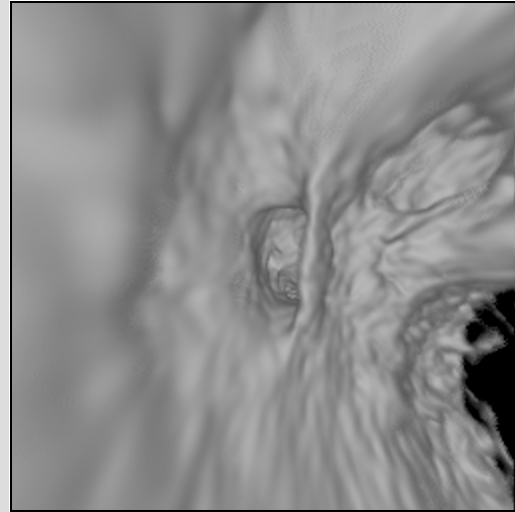
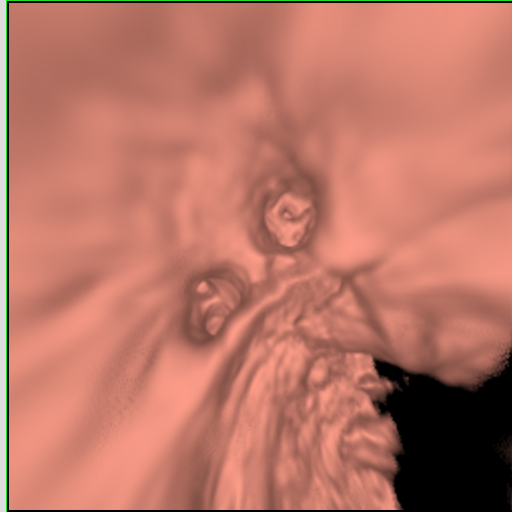
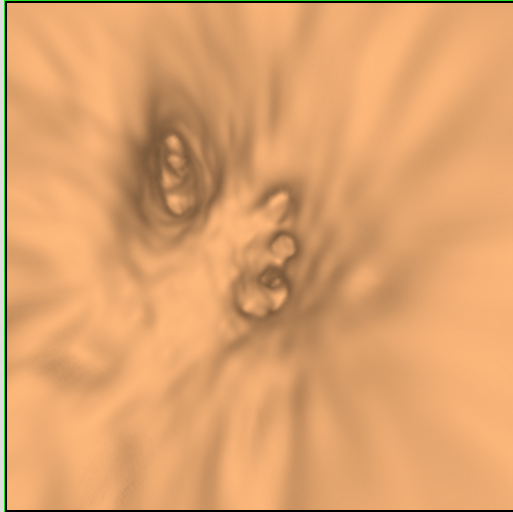
Vena pulmonalis



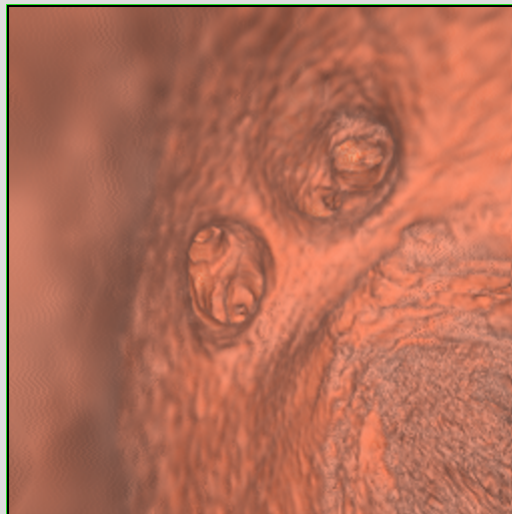
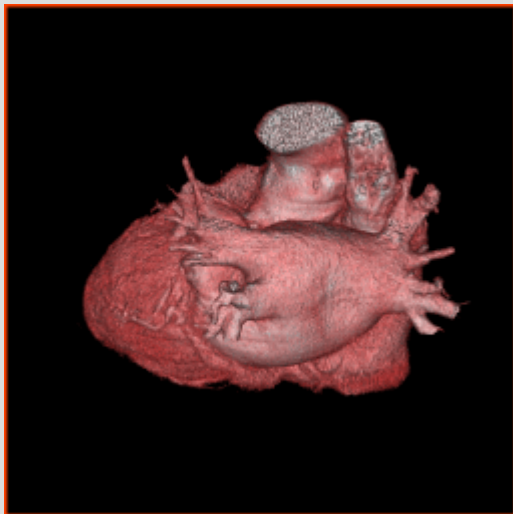
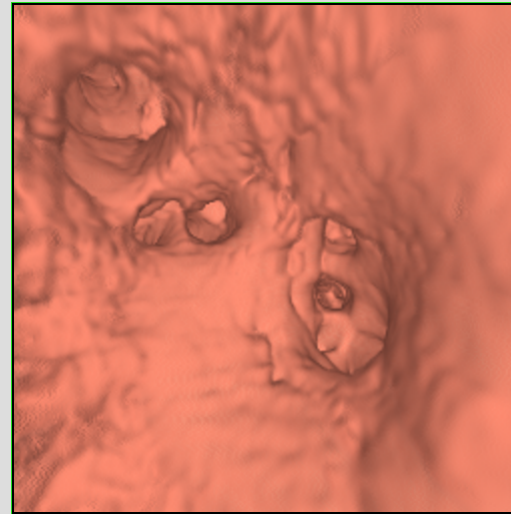
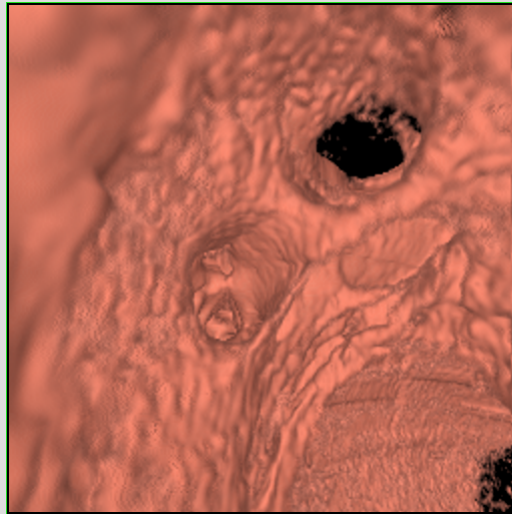
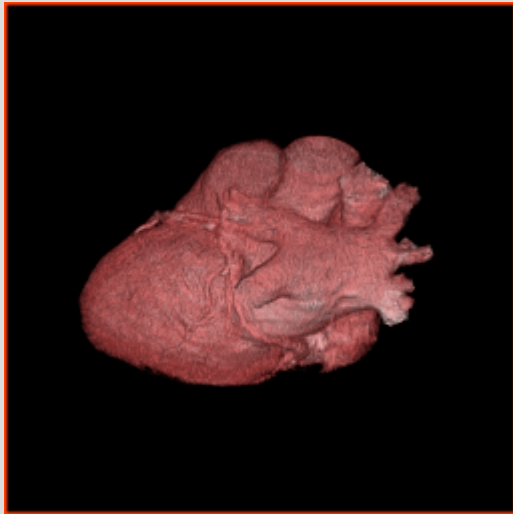
Vena pulmonalis



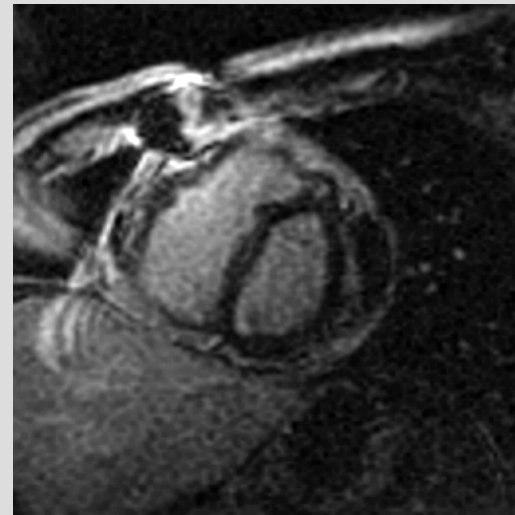
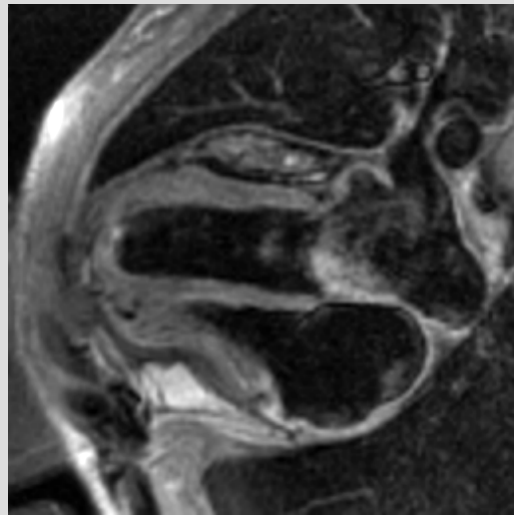
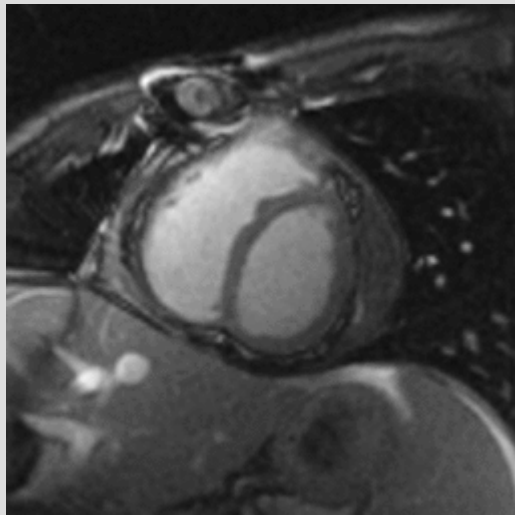
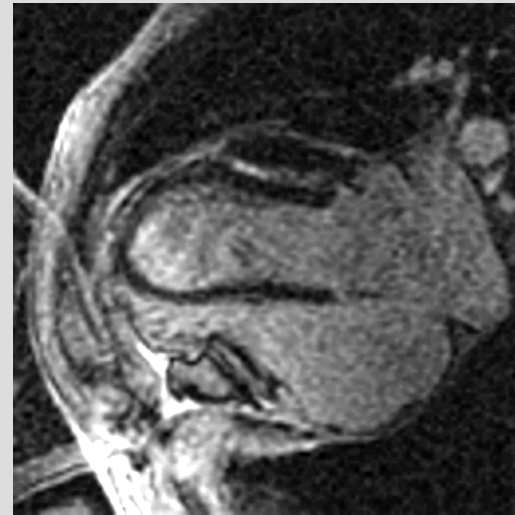
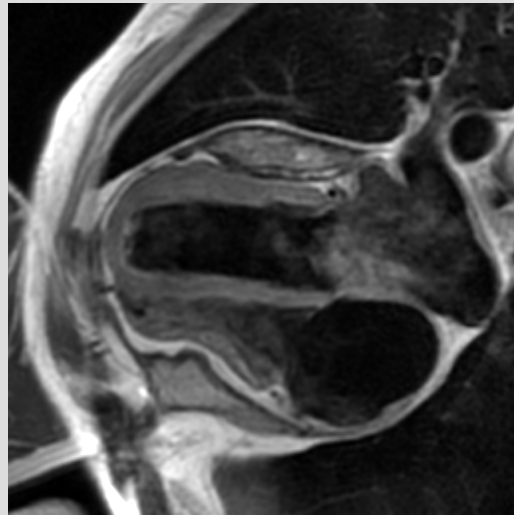
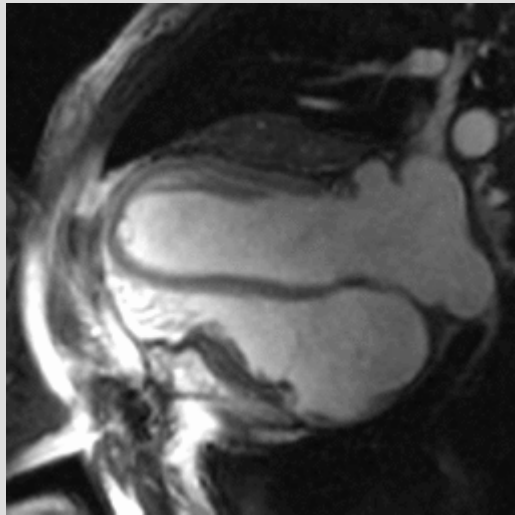
Endo



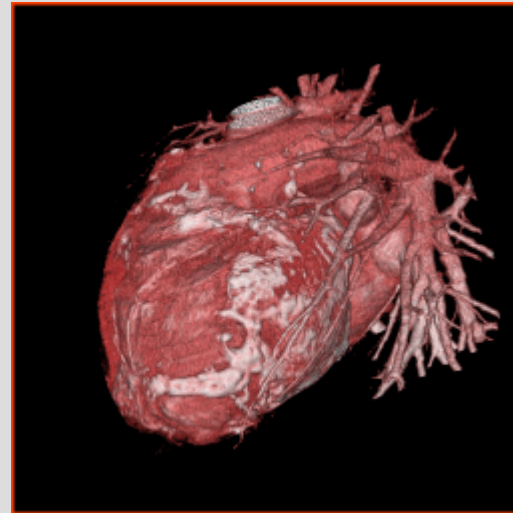
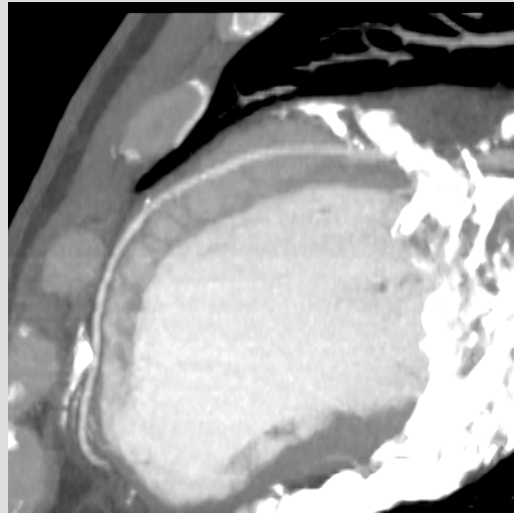
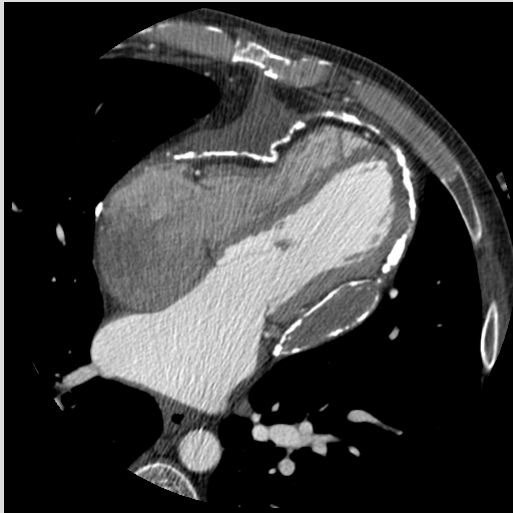
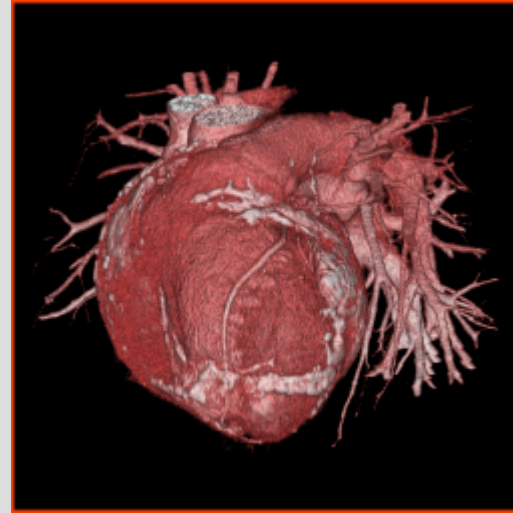
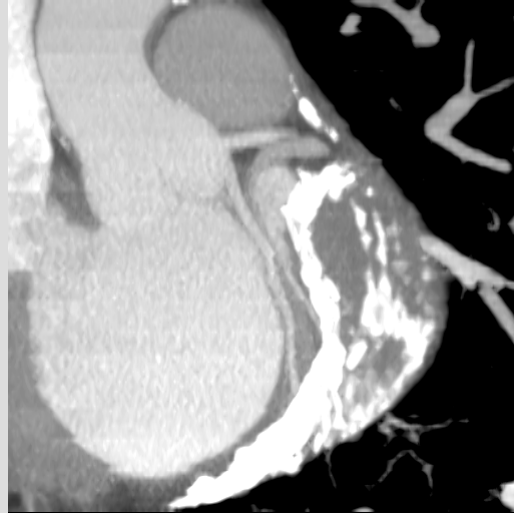
CT



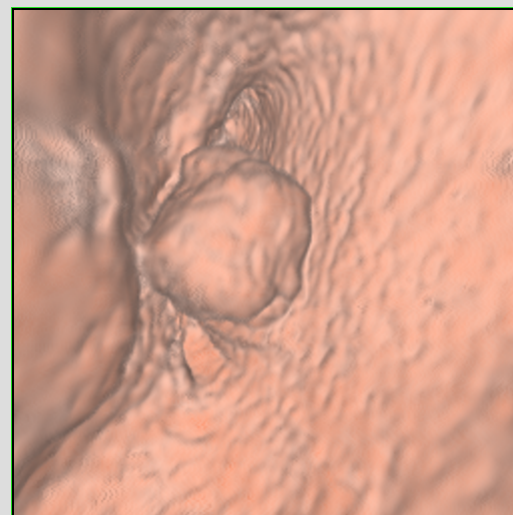
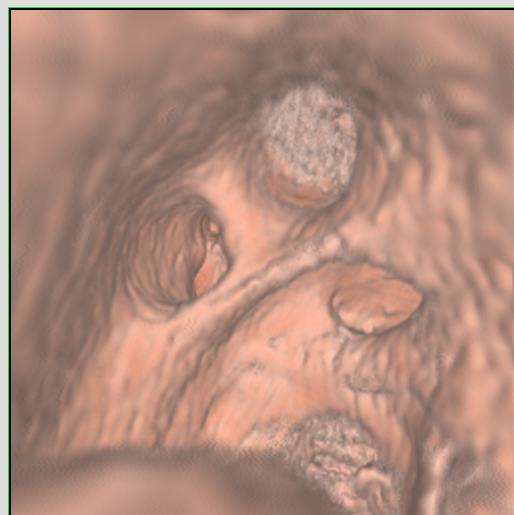
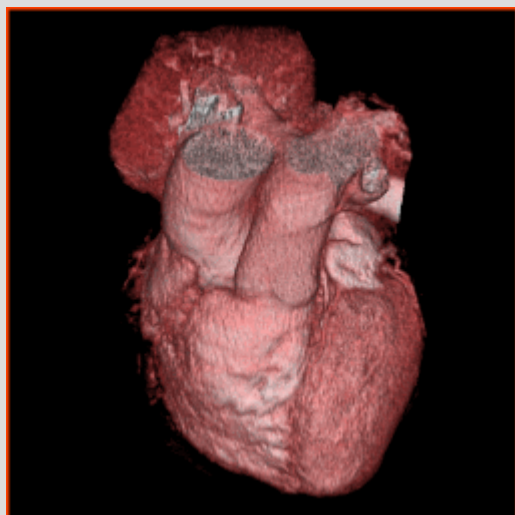
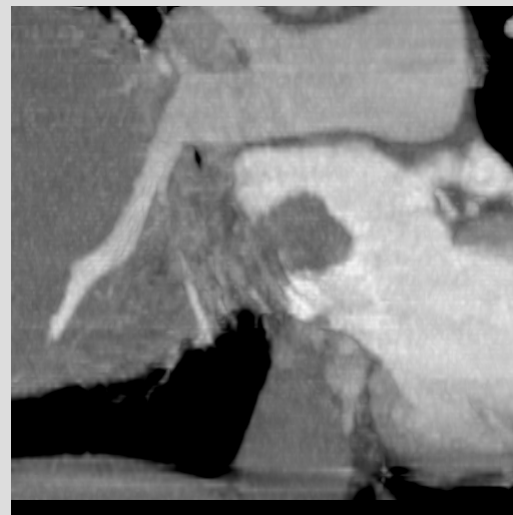
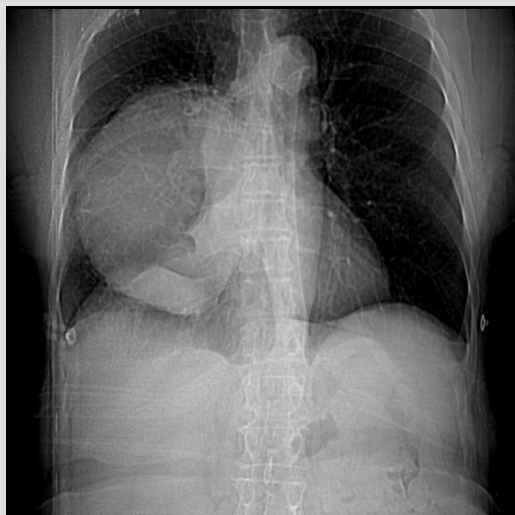
Constrictiv MR



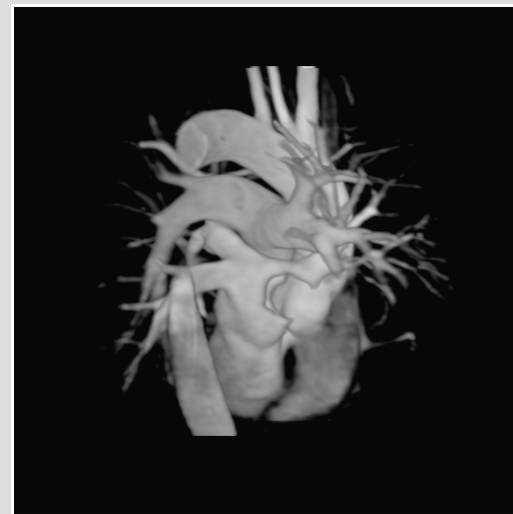
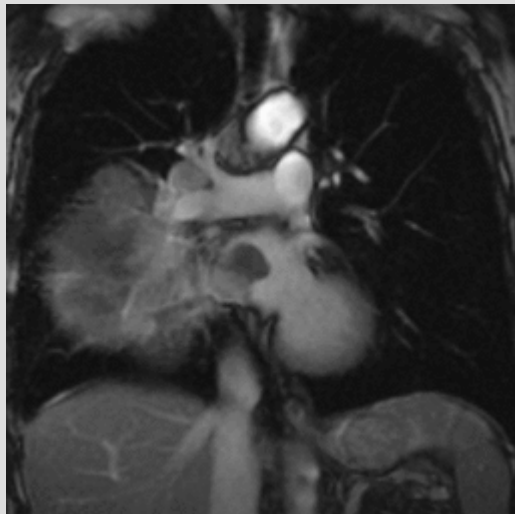
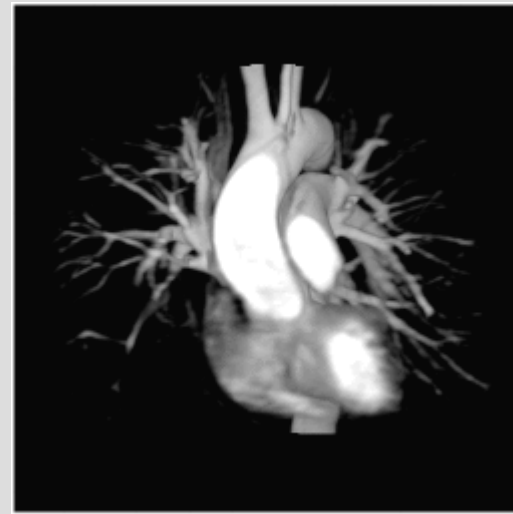
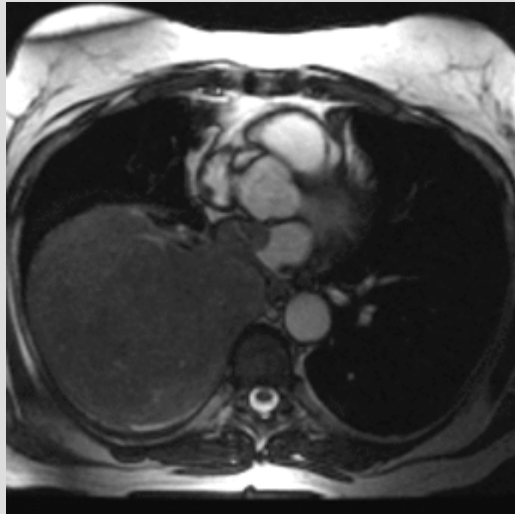
Constrictiv CT



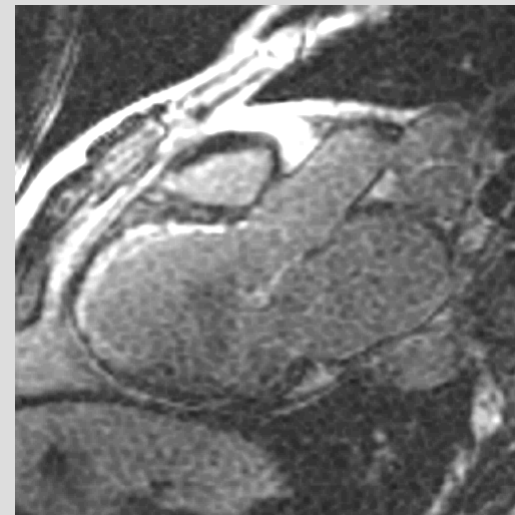
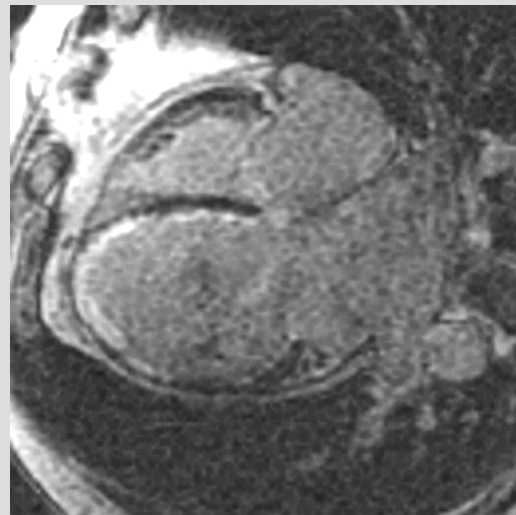
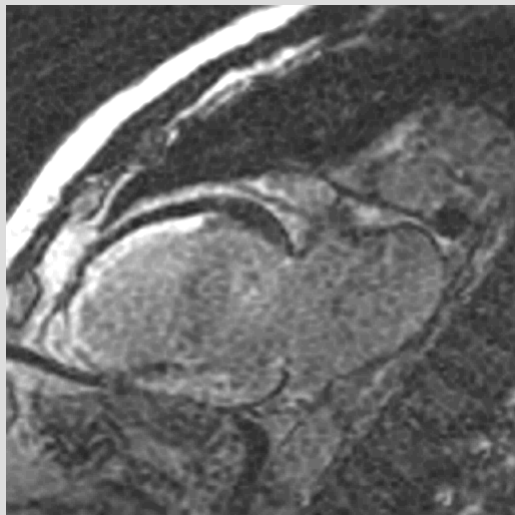
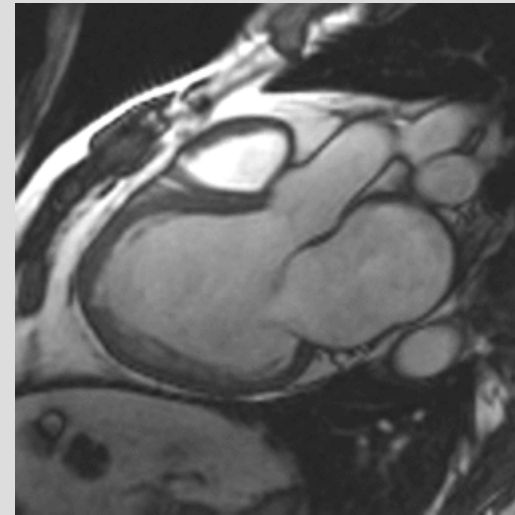
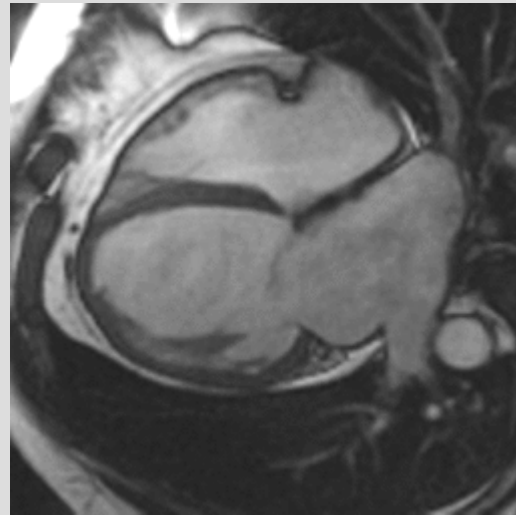
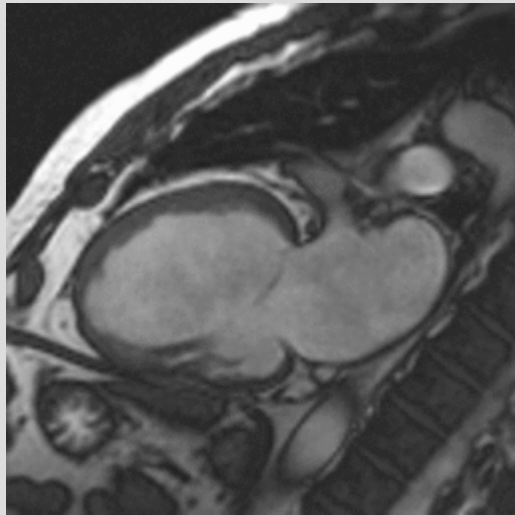
Tüdő tu. CT



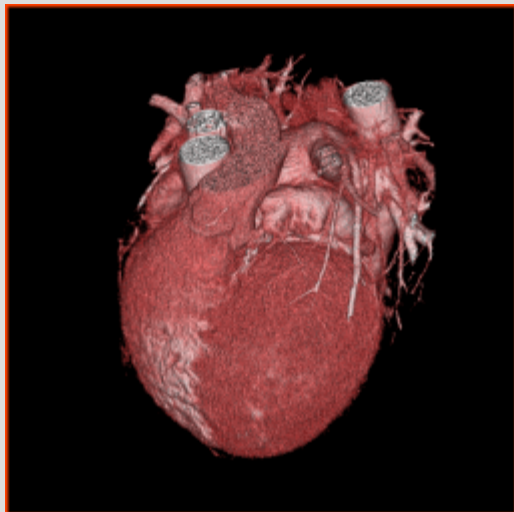
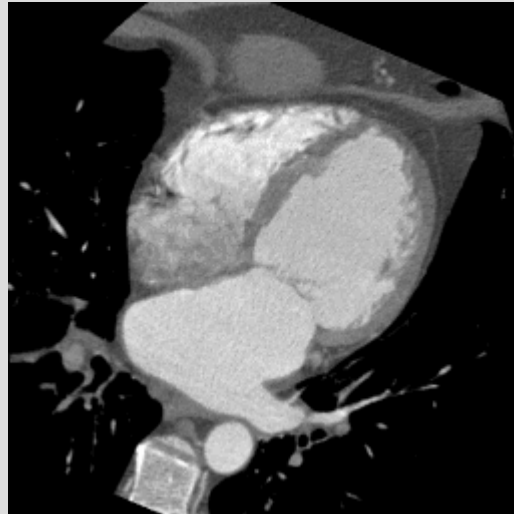
Tüdő tu. MR



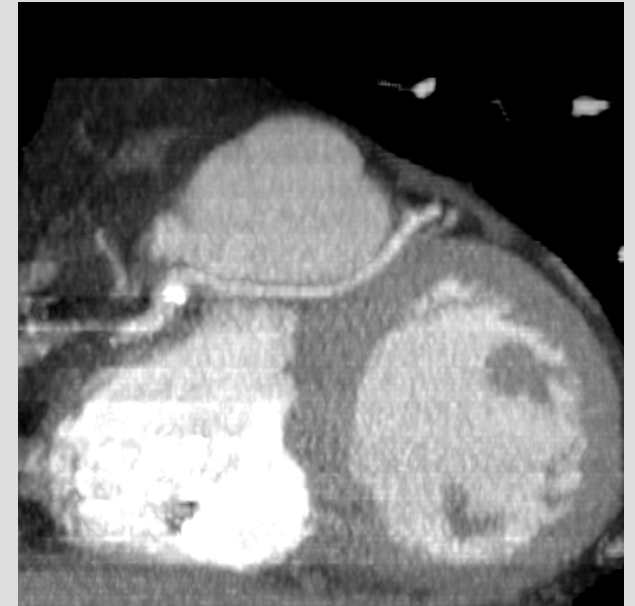
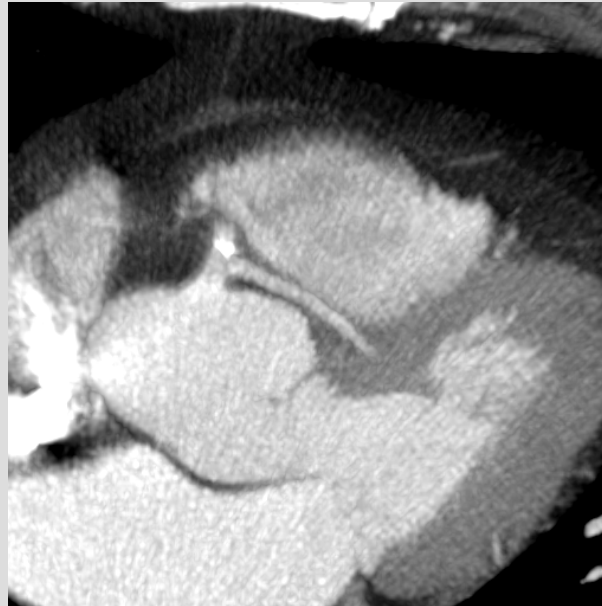
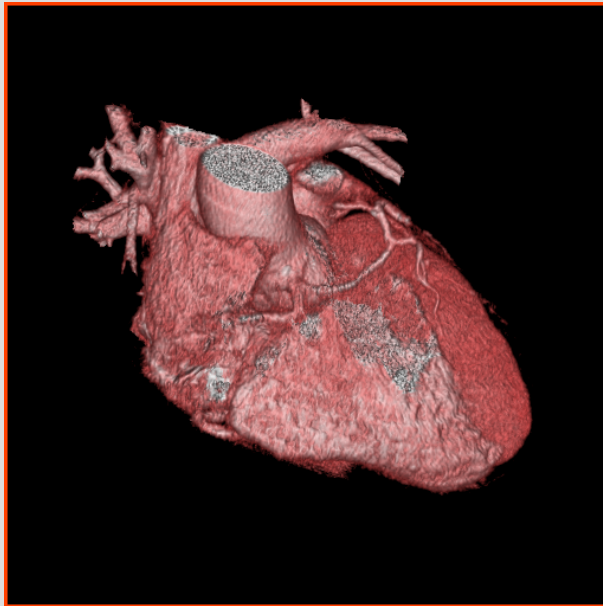
Bk reductio előtt MR



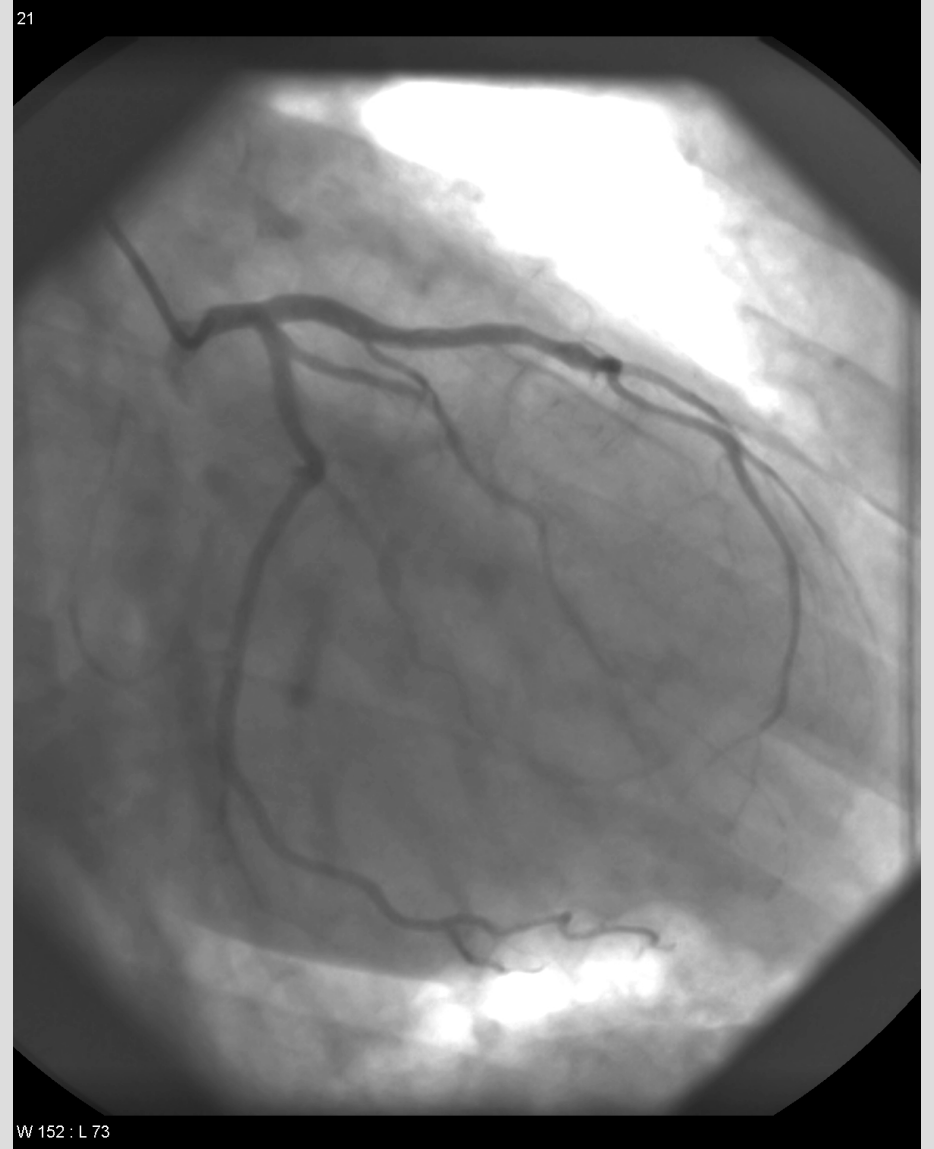
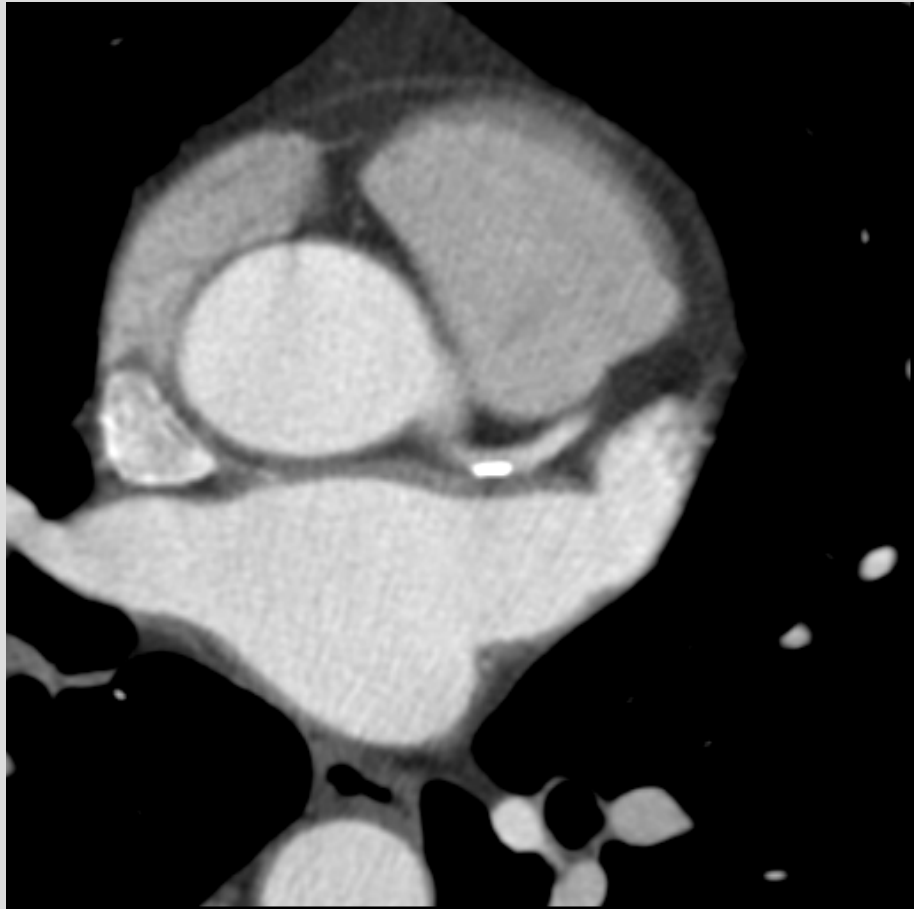
Bk reductio előtt CT



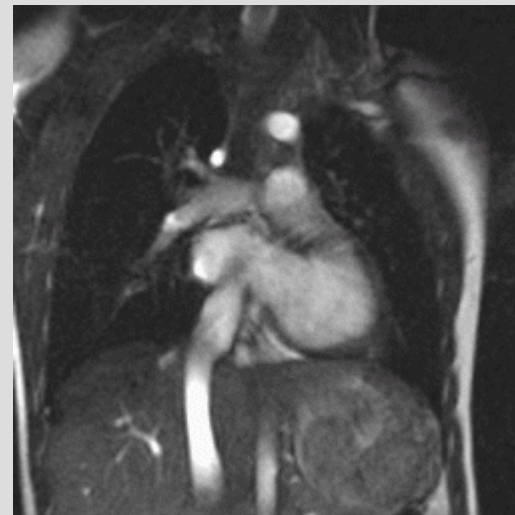
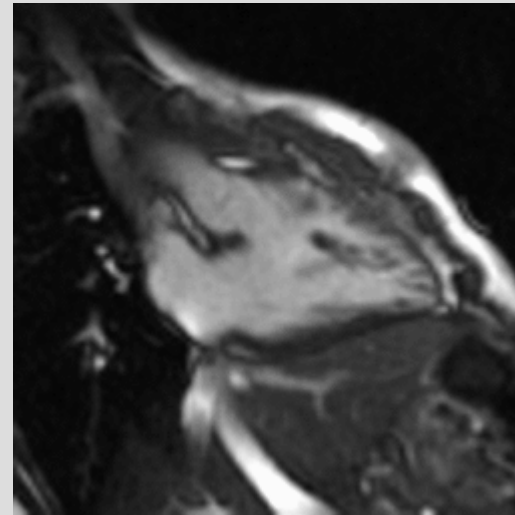
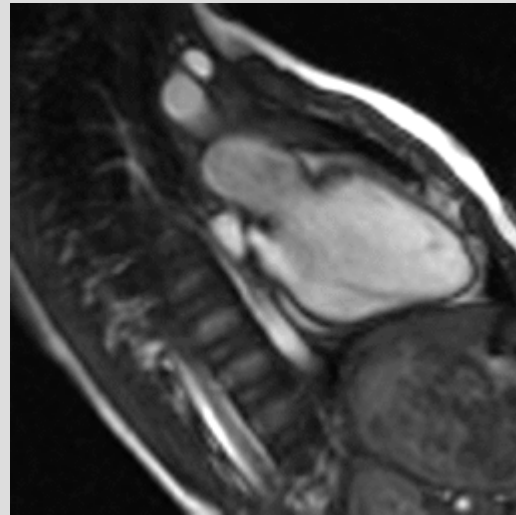
Anomalias koronaria eredés



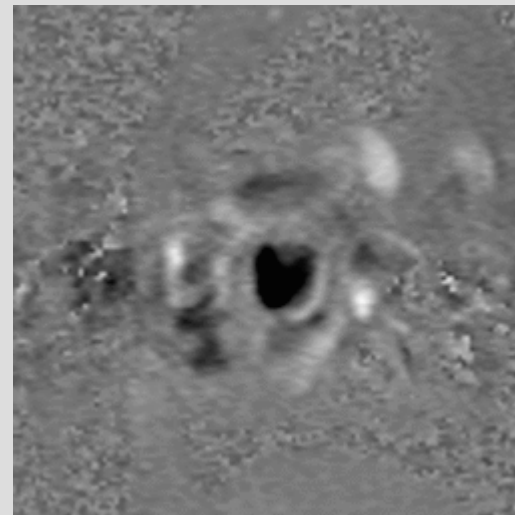
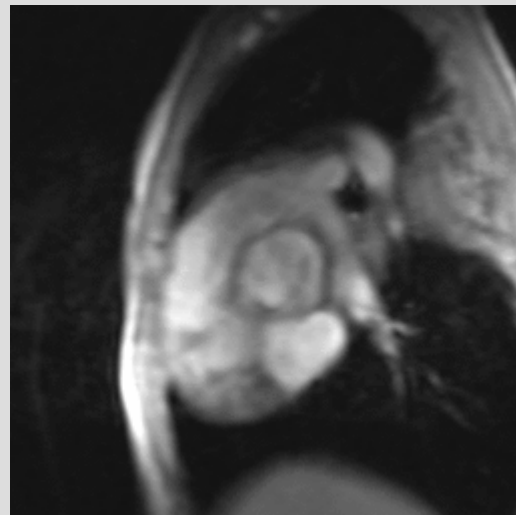
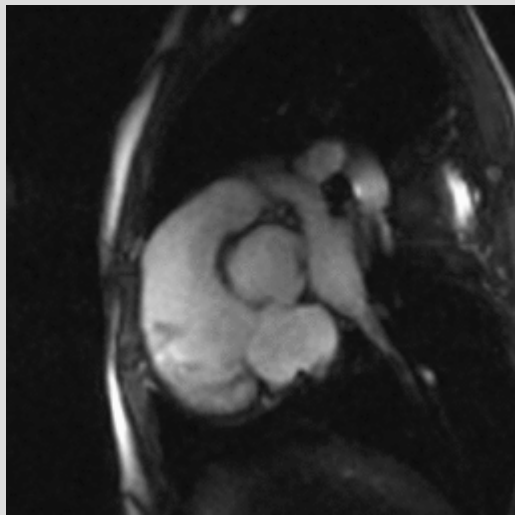
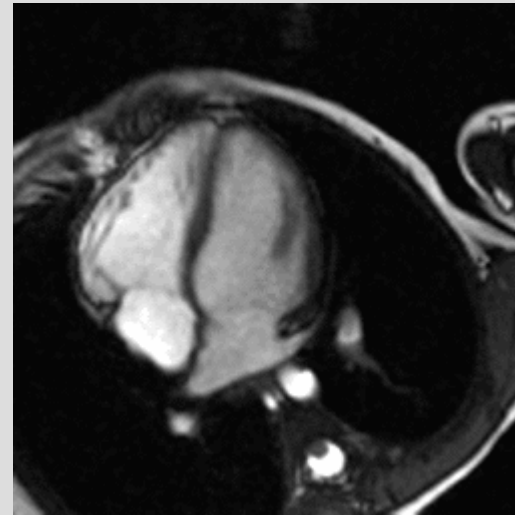
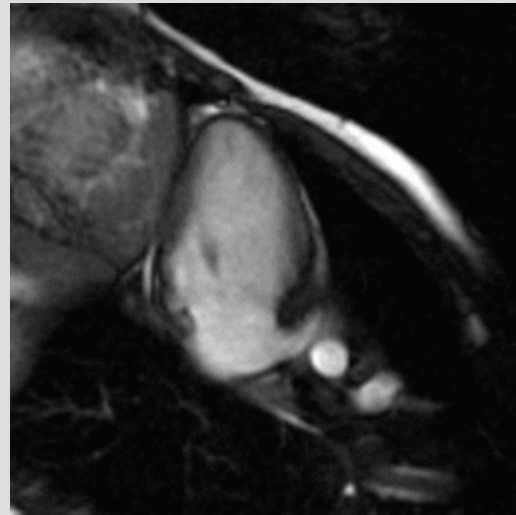
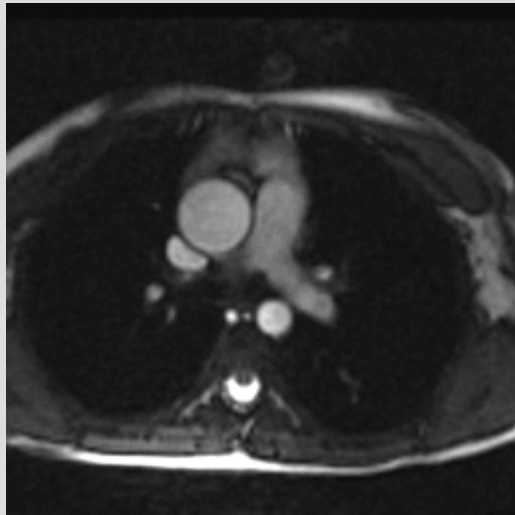
Stenosis CTA vs CXA



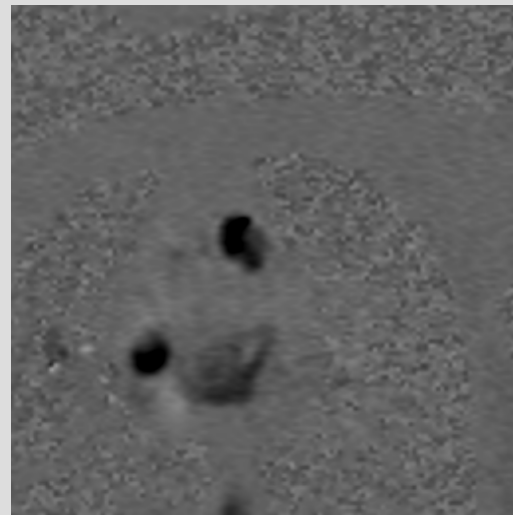
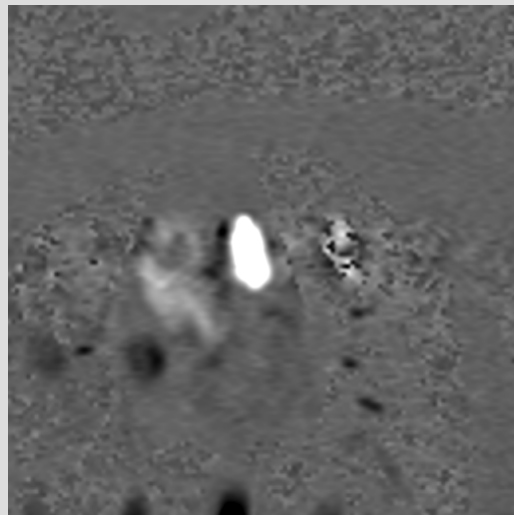
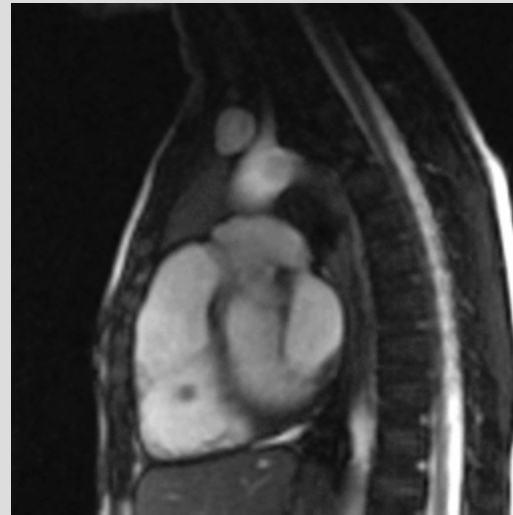
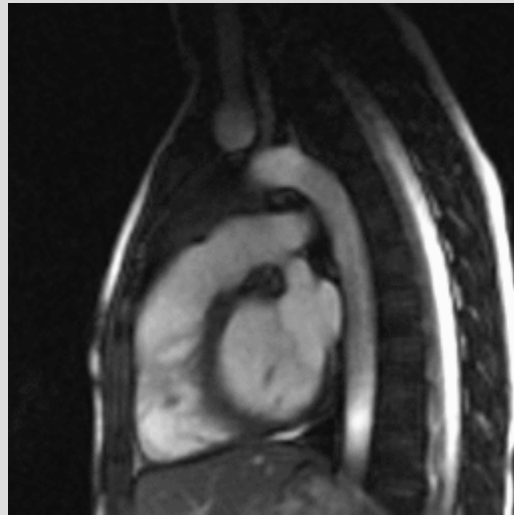
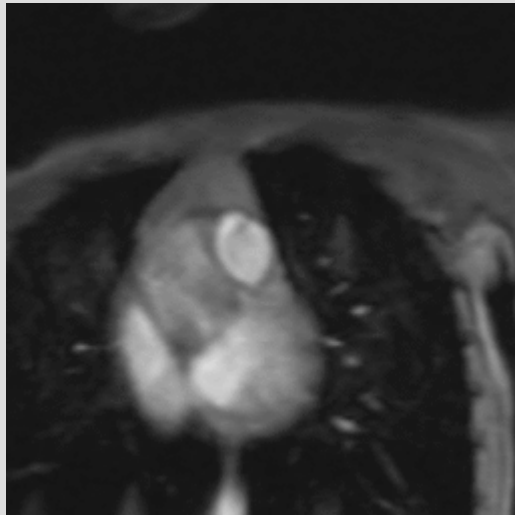
TGA: post.op. Senning



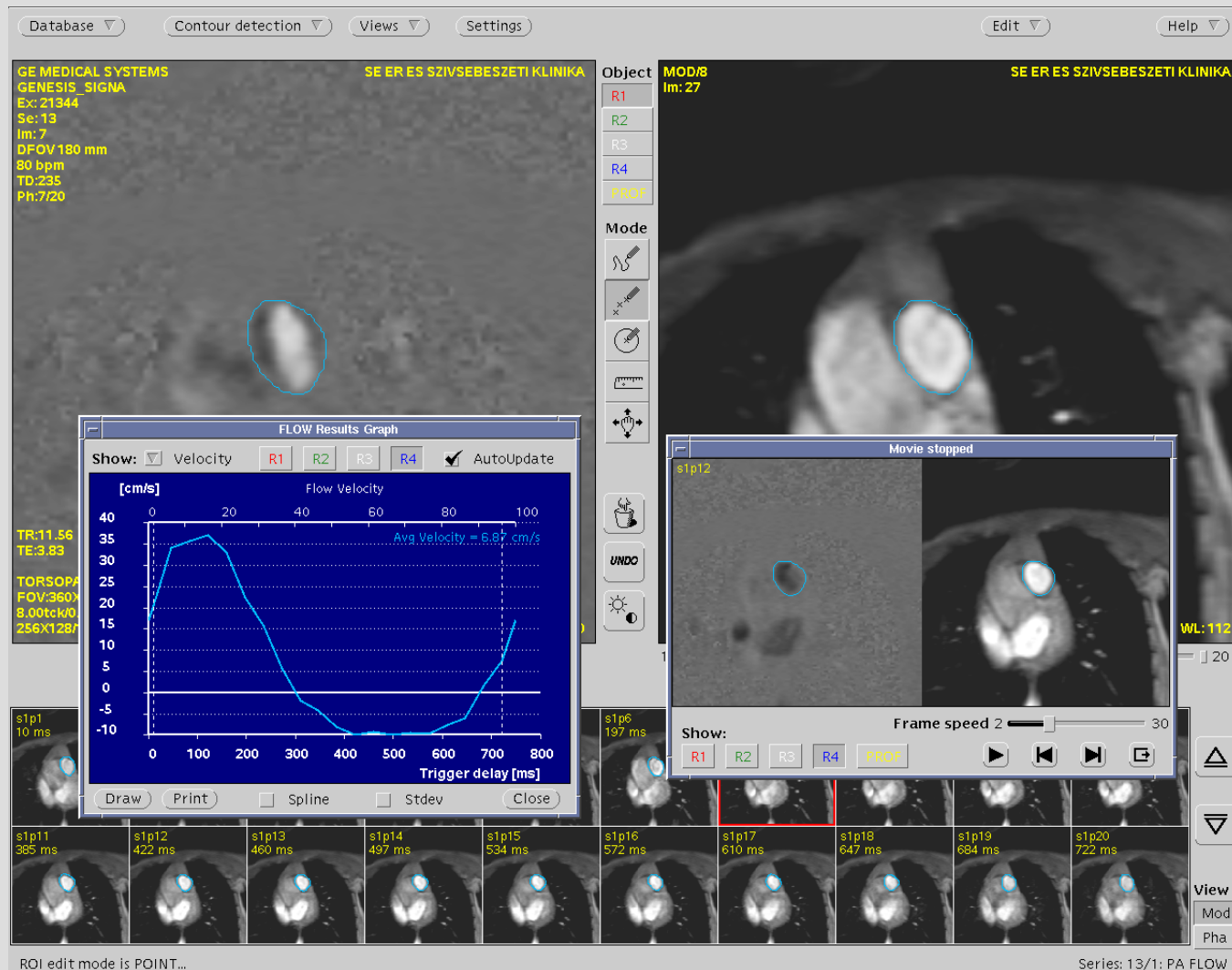
FIV st.p.op.



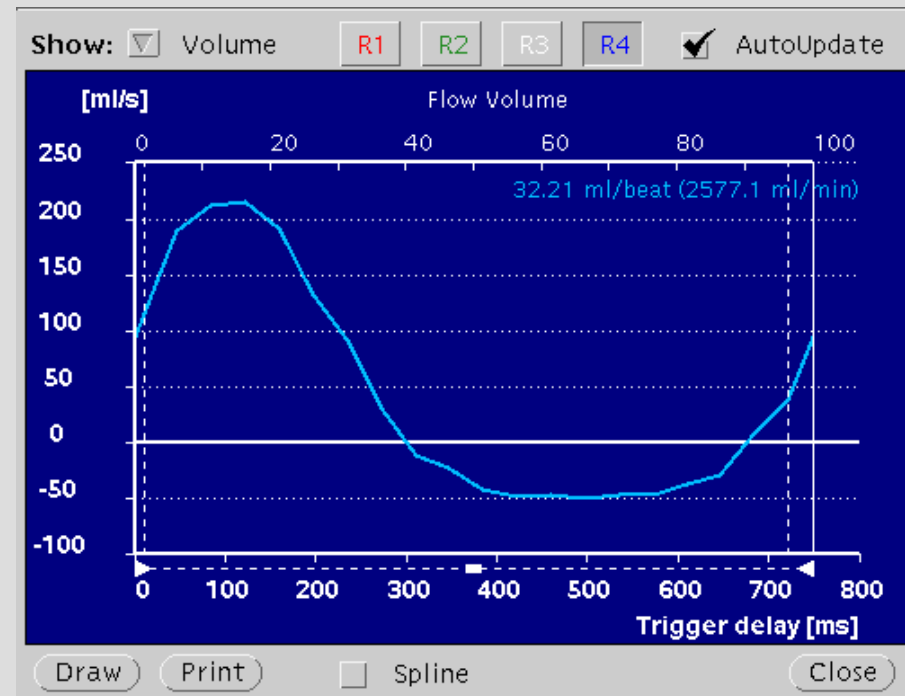
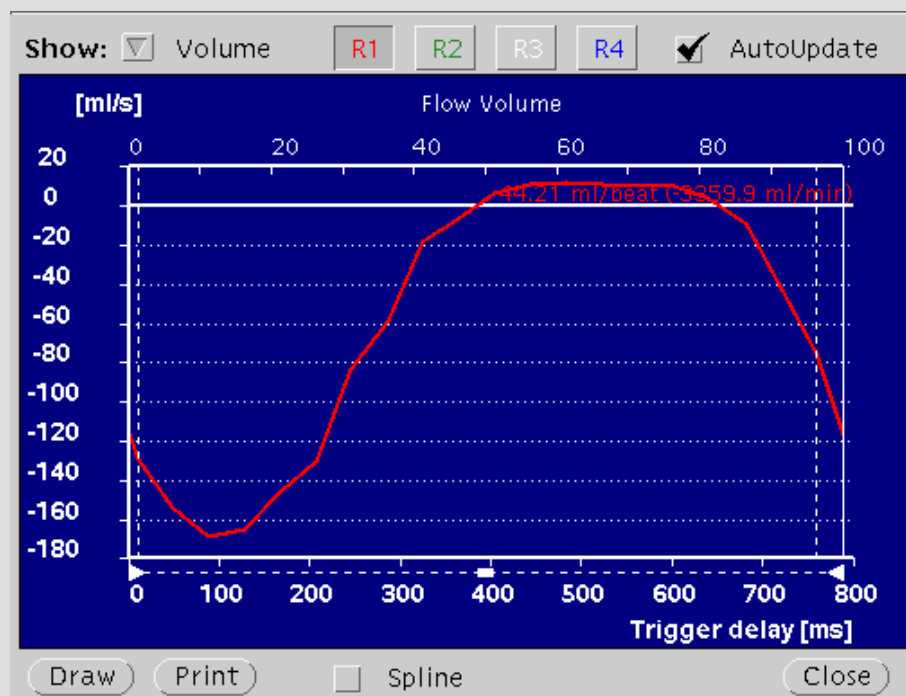
RVOT FIESTA



Áramlás kiértékelés



Áramlás kiértékelés



Funkció kiértékelés

Database ▾ Contour detection ▾ Views ▾ Settings ▾ Edit ▾ Help ▾

	5					10					15					20				
ALL	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	7	18	19	20
14																				
13																				
12																				
11																				
10																				
9																				
8																				
7																				
6																				
5																				
4																				
3																				
2																				
1																				

Study View

Mode

Element

GE MEDICAL SYSTEMS
GENESIS_SIGNA
Ex: 24128
Se: 17
Im: 200
SP: 12.98
DFOV 180 mm
73 bpm
TD: 790
SI: 1014
PR: 20/20

SE ER ES SZIVSEBESZETI KLINIKA

20060724
171257
Mag: 2.00

WW: 950 WL: 351
Contrast: 55 Brightness: 55

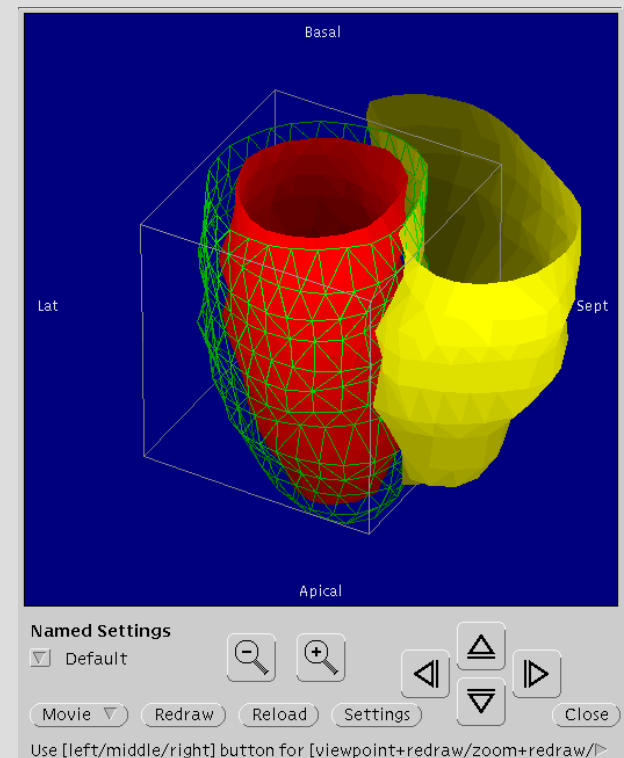
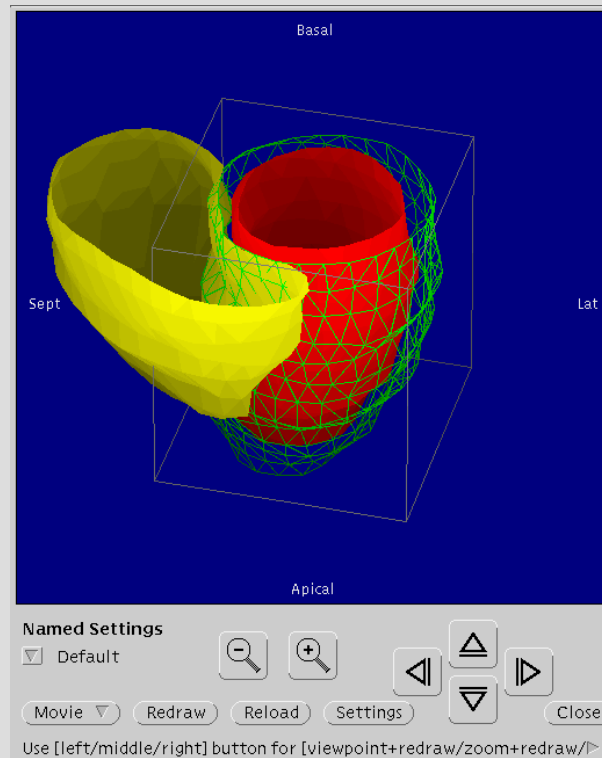
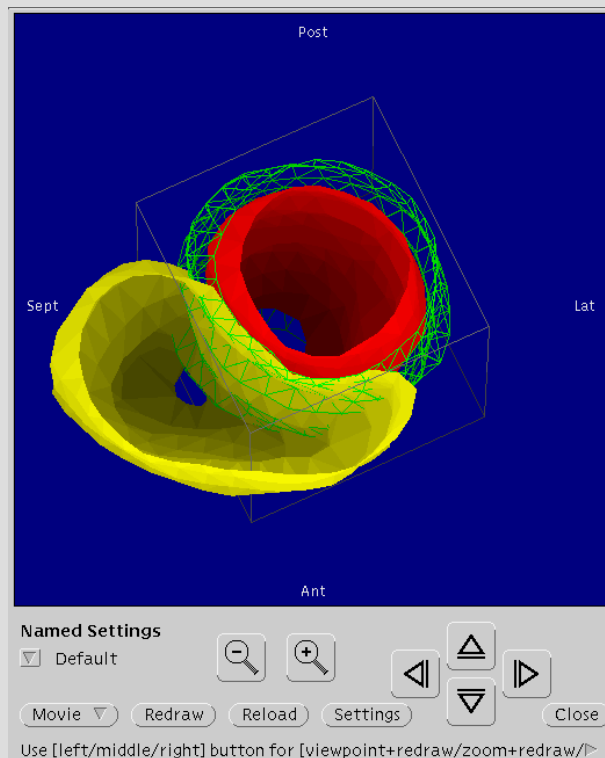
Movie

s10p20

s10p9 338 ms
s10p10 379 ms
s10p11 420 ms
s10 462
s10p15 585 ms
s10p16 626 ms
s10p17 667 ms
s10p18 708 ms
s10p19 749 ms
s10 790

SER/ACQ: 17/1: SA Fiesta

Funkció kiértékelés



Köszönöm a figyelmet!

