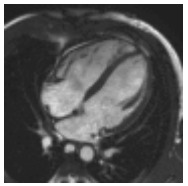


Semmelweis Egyetem
KARDIOLÓGIAI KÖZPONT

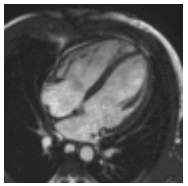
Felnőttkorú Veleszületett Szívbetegek 9. Fóruma

Bal kamra kiáramlási pálya betegségei

MRI szerepe a bal kamra kiáramlási pálya betegségeinek hosszútávú nyomonkövetésében

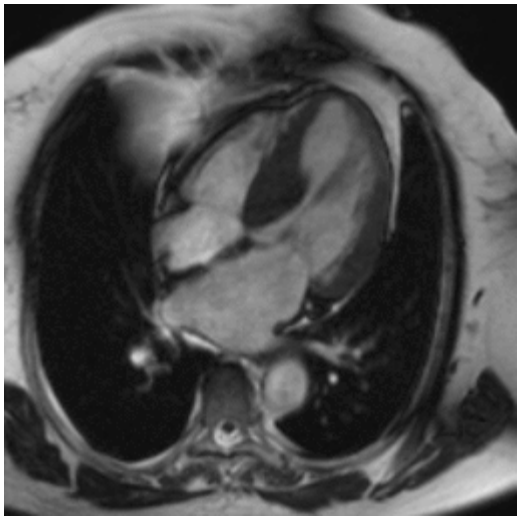
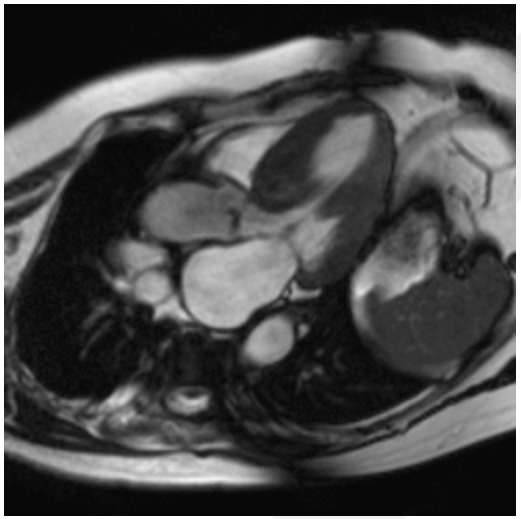
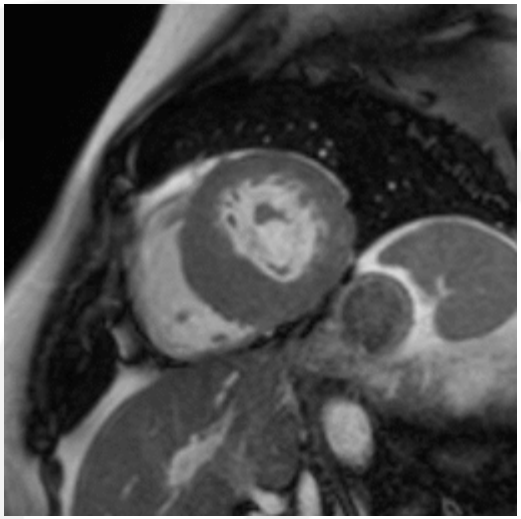
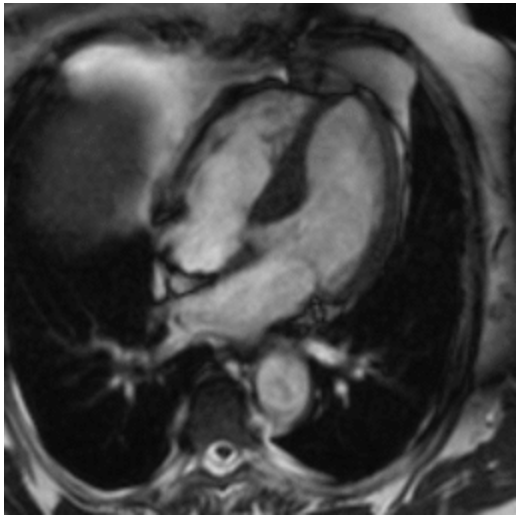
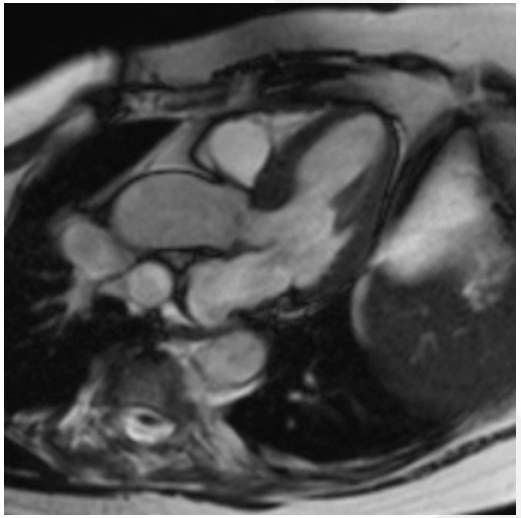
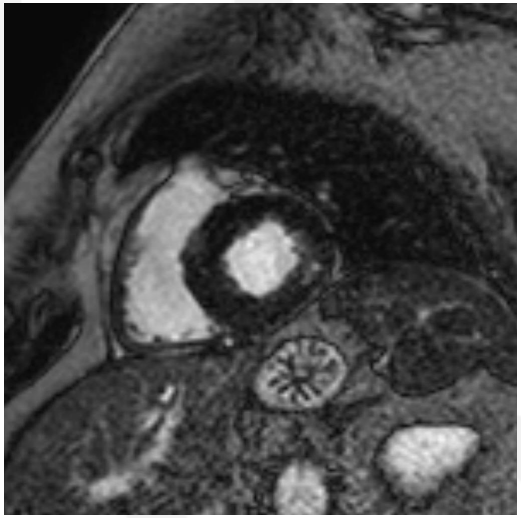
Tóth Attila, 2017 VSZÉK

Bal kamra kiáramlási pálya: szív MR

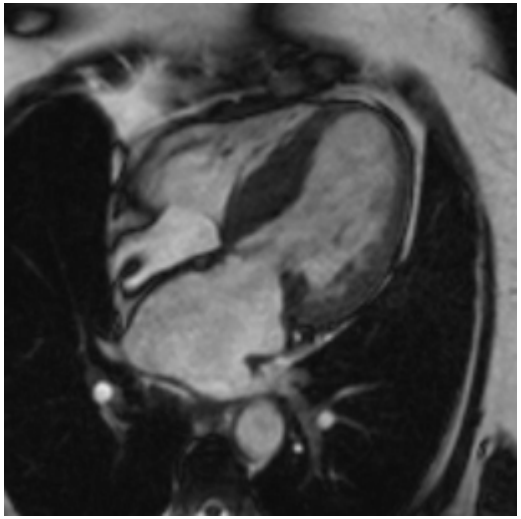
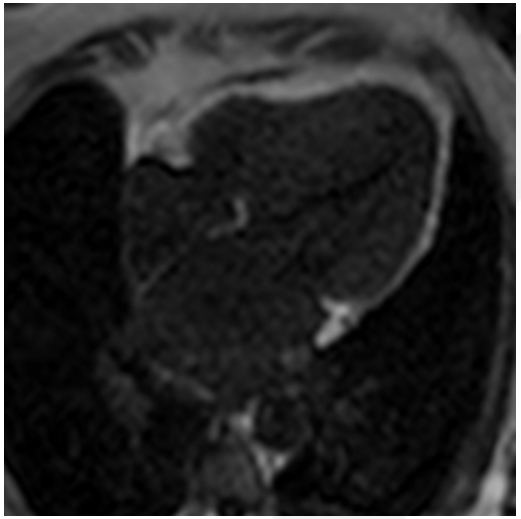
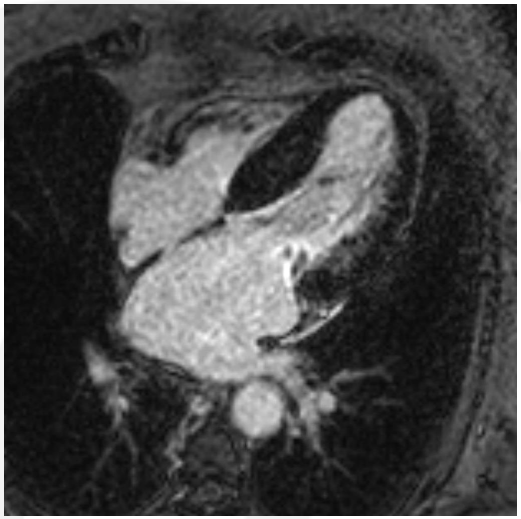
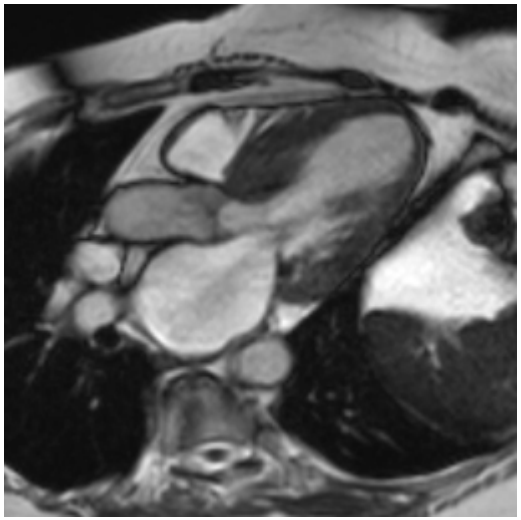
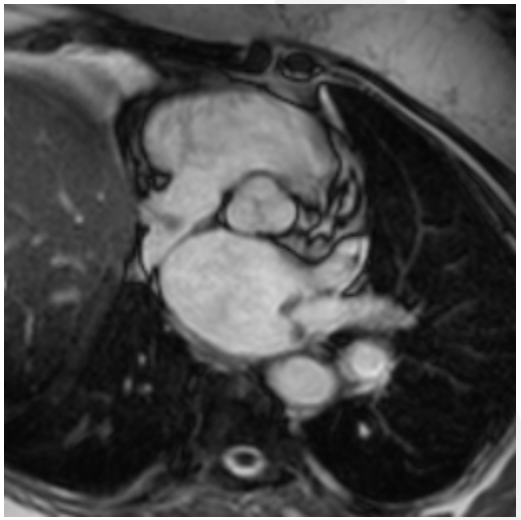
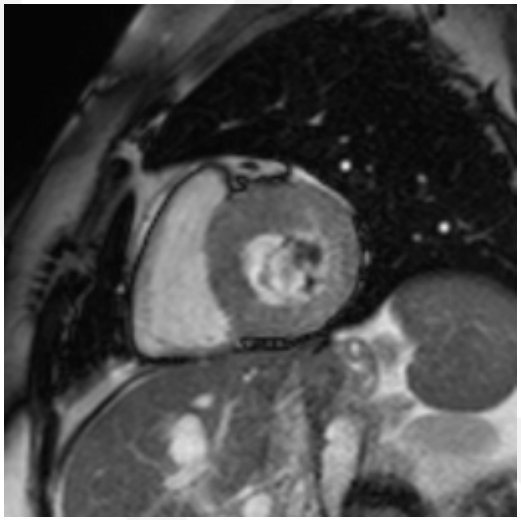


- ECHO – szívultrahang
  - Elsődleges képalkotó módszer
- CT – EKG szinkronizációval
  - Mozgóképek készítése emeli a sugárdózist
- MR előnyei
  - Nem szükséges kontrasztanyagot adni
  - Nem jár sugárteheléssel

HOCM arcai – monozigóta ikrek

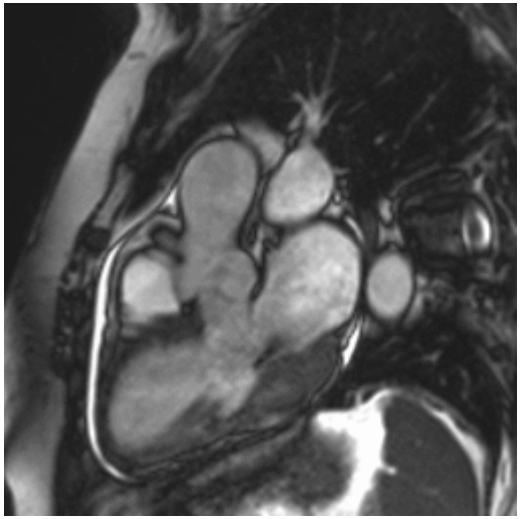
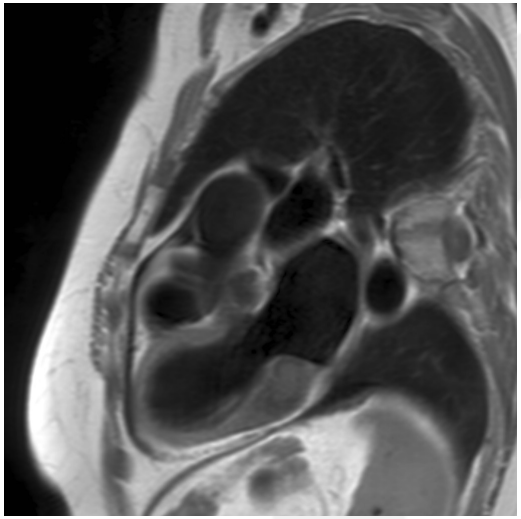
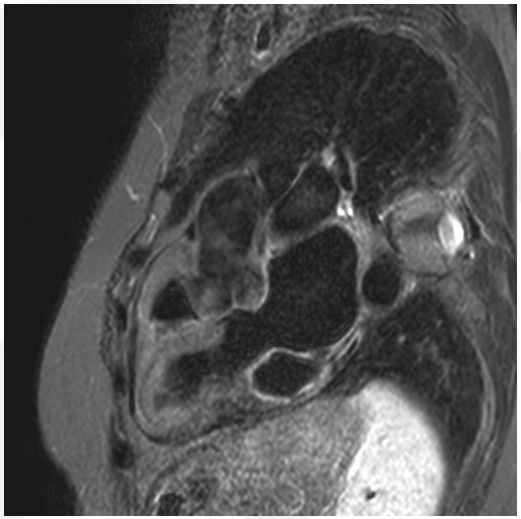
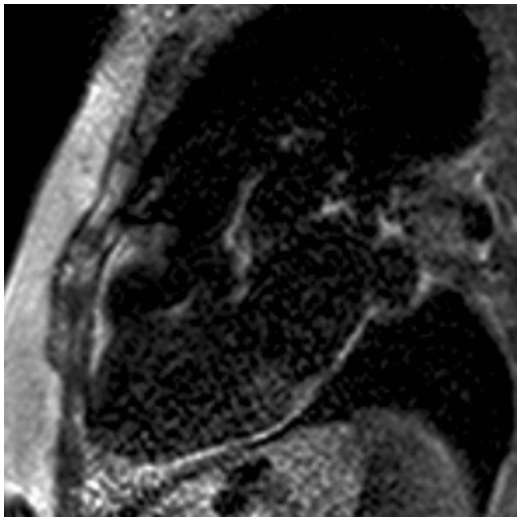
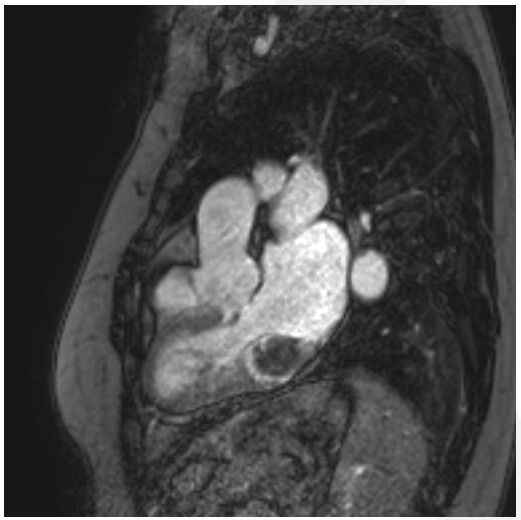
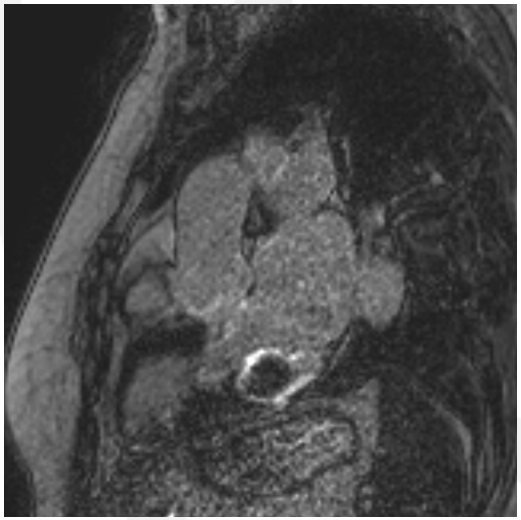







295cm/s, 35/14Hgmm, AVA 1.11cm2, 22mm

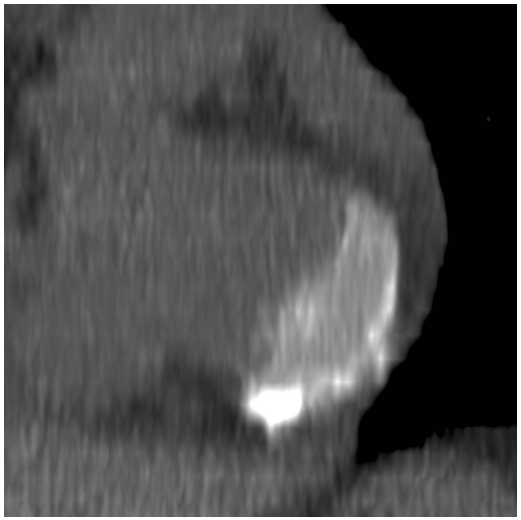
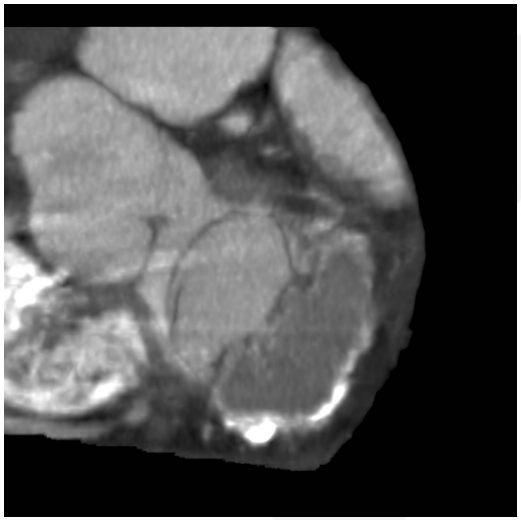
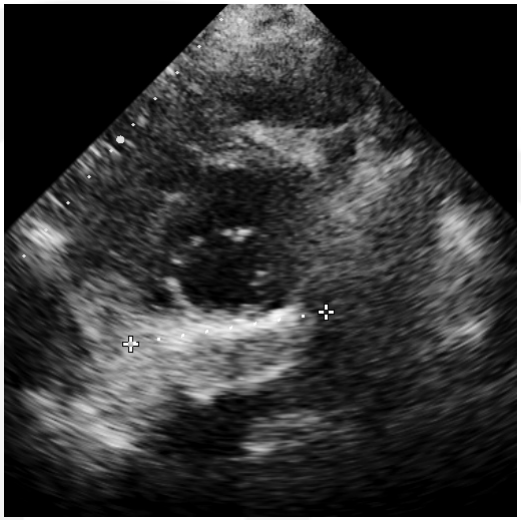
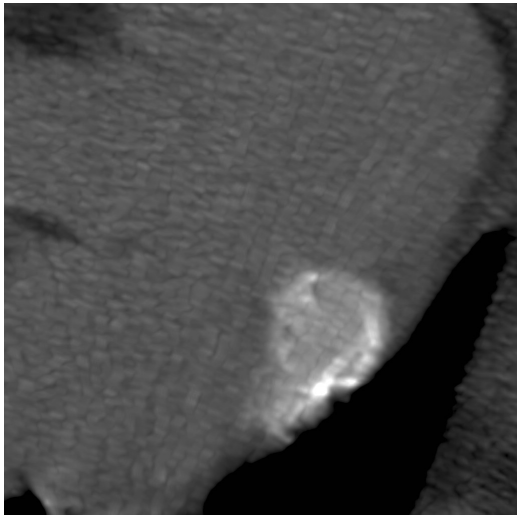
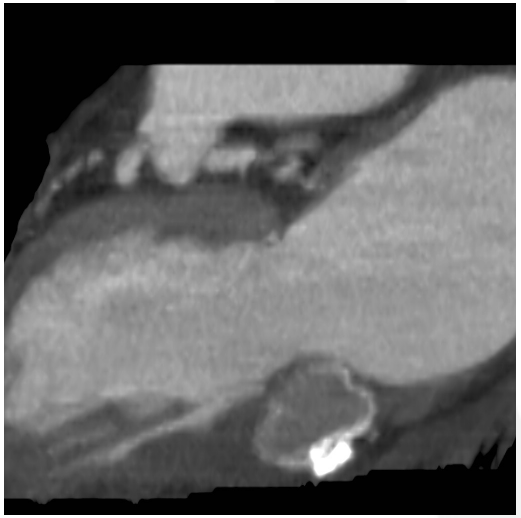
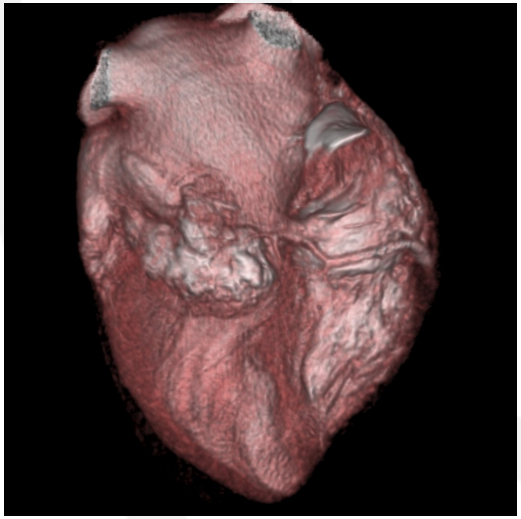







LV: EF 58/79, ESVi 32/10, EDVi 76/48, SVi 44/38, Mi 82/111
RV: EF 56/69, ESVi 22/14, EDVi 49/44, SVi 28/31, Mi 13/18

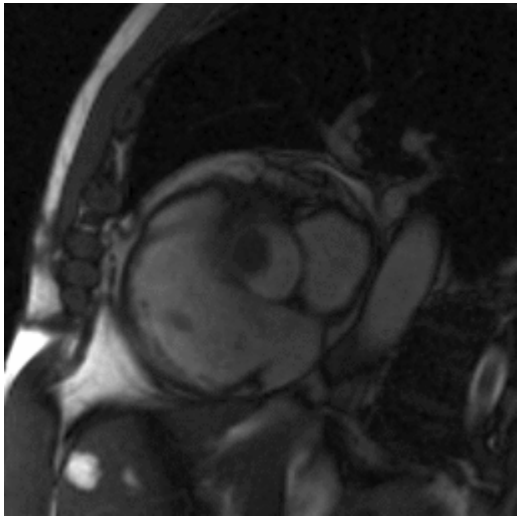
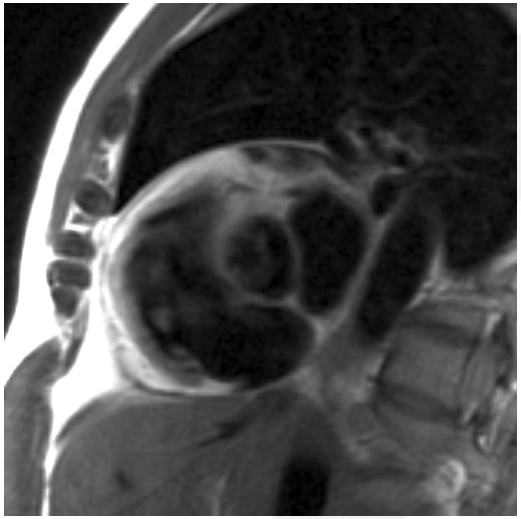
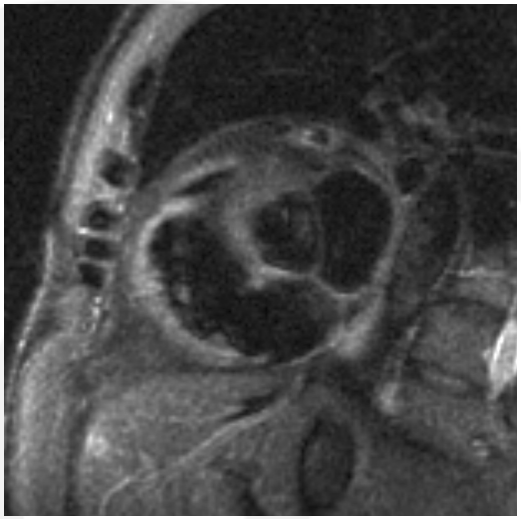
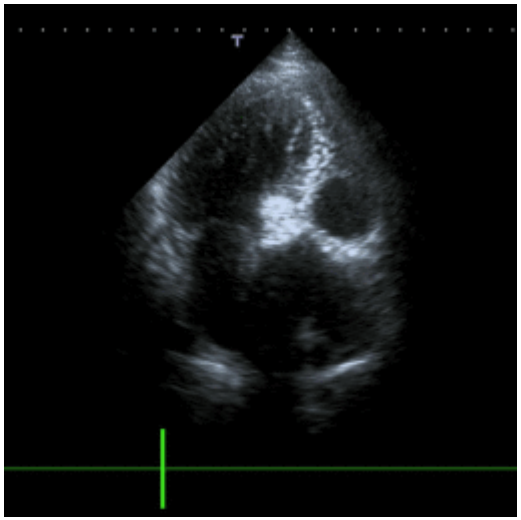
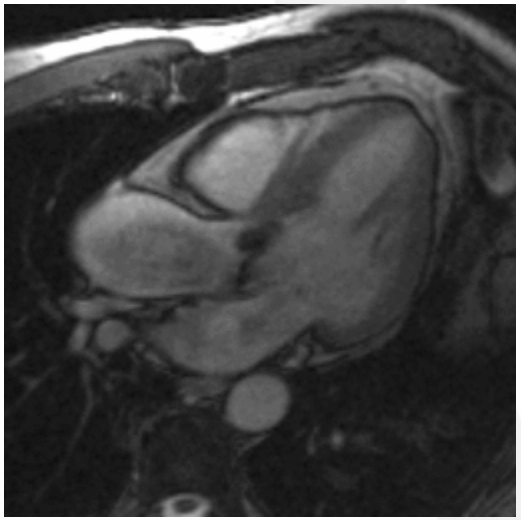
Mitralis elsajtosodó kalcifikáció – MR

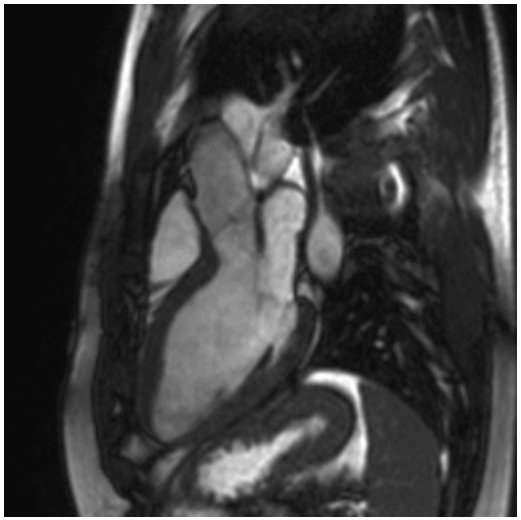
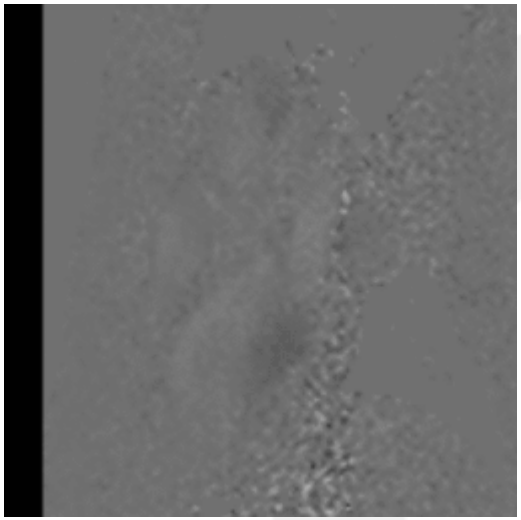
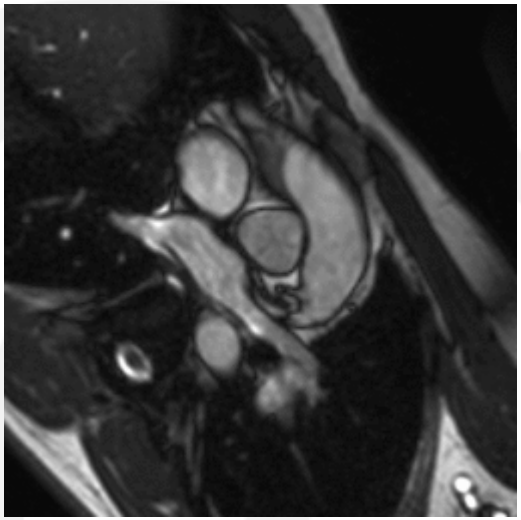
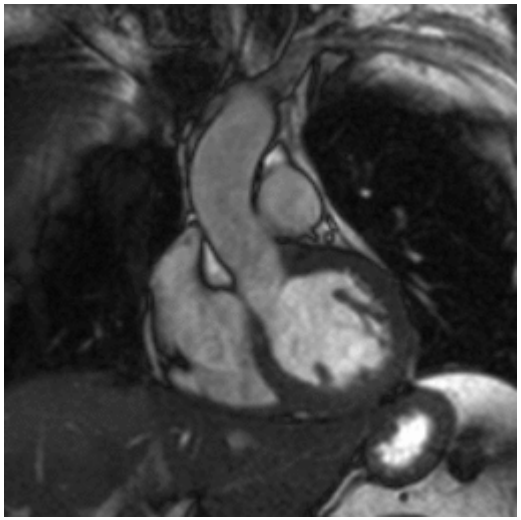
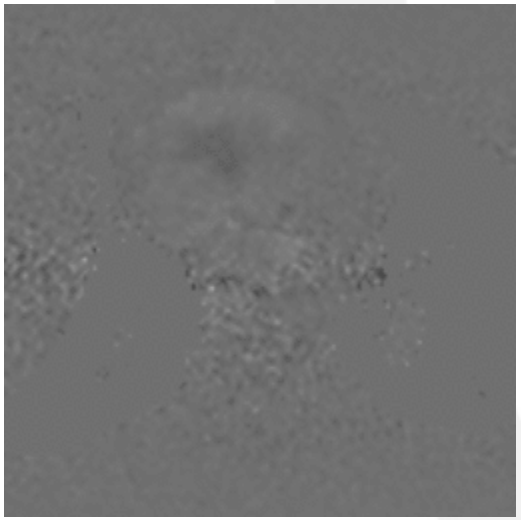
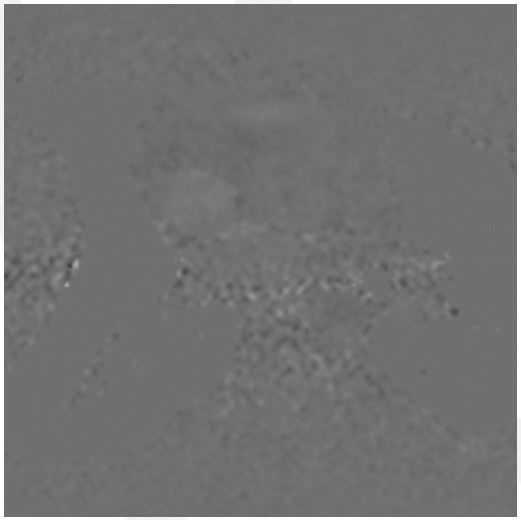
Mitralis sajtos kalcifikáció – CT, ECHO

Subaorticus elsajtosodó kalcifikáció?

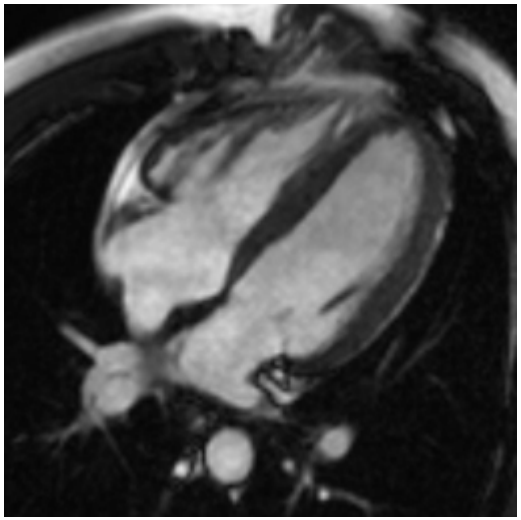
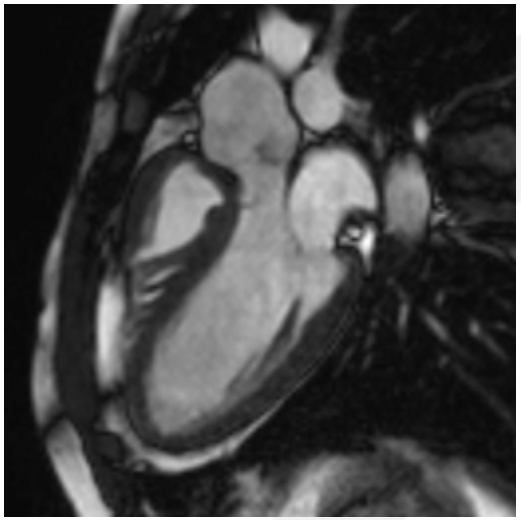
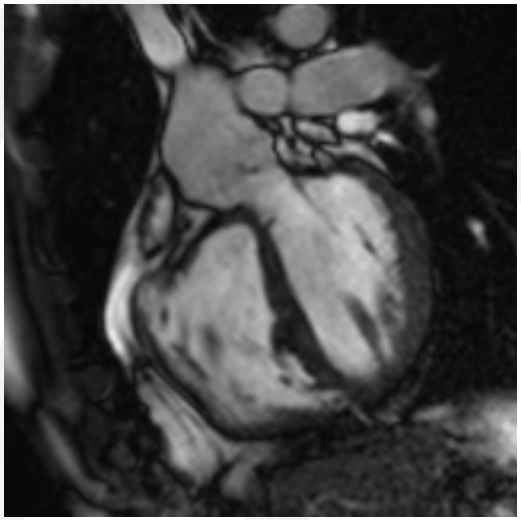
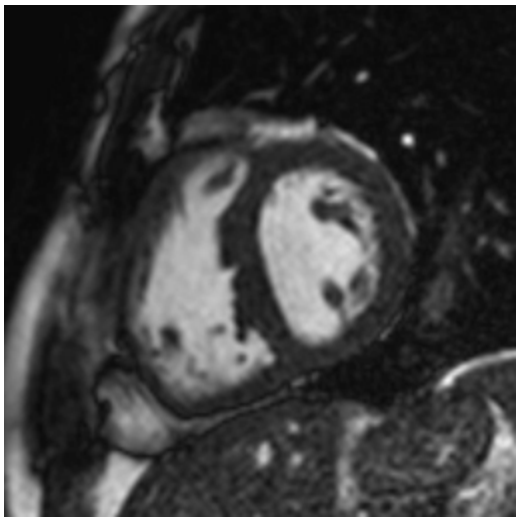
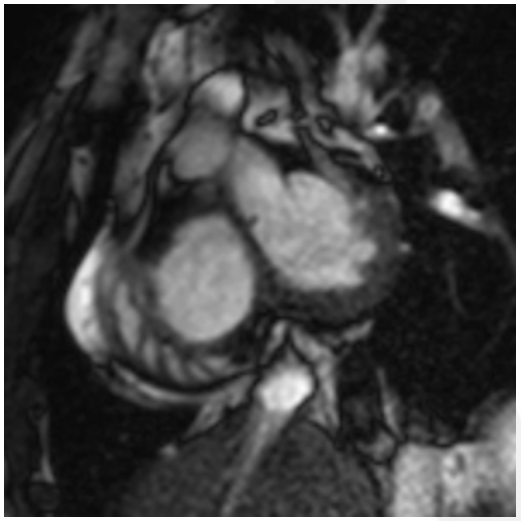
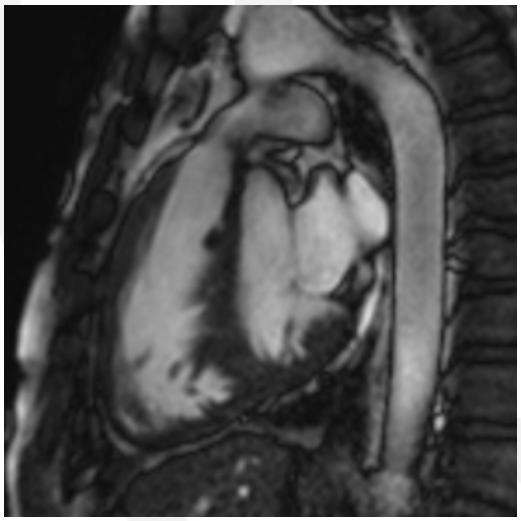







Subaorticus membrán (214 18 Rf 1.5%)

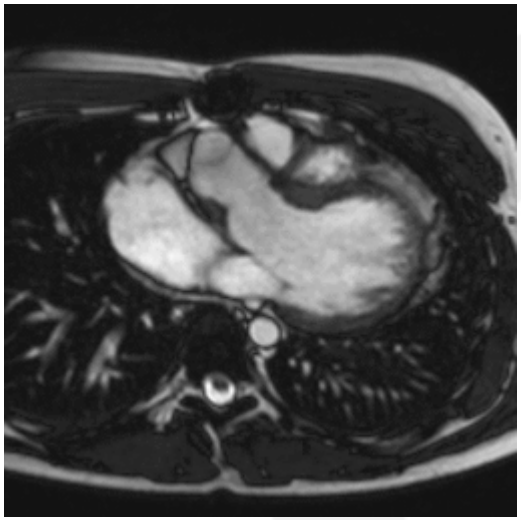
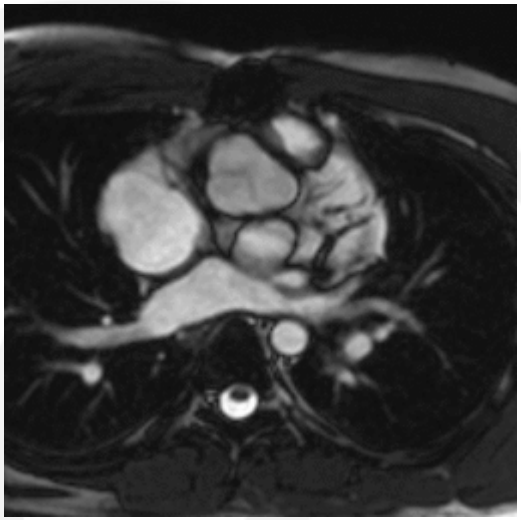
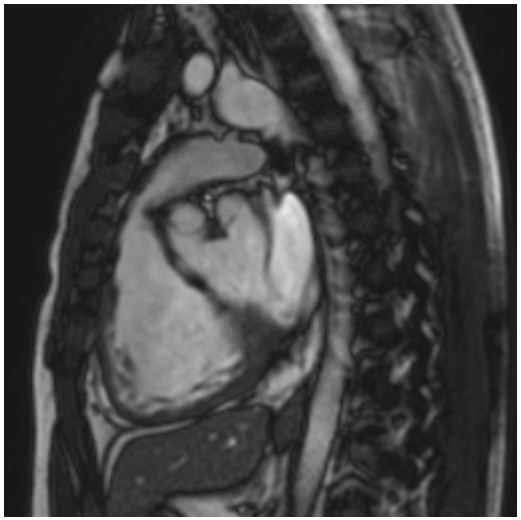
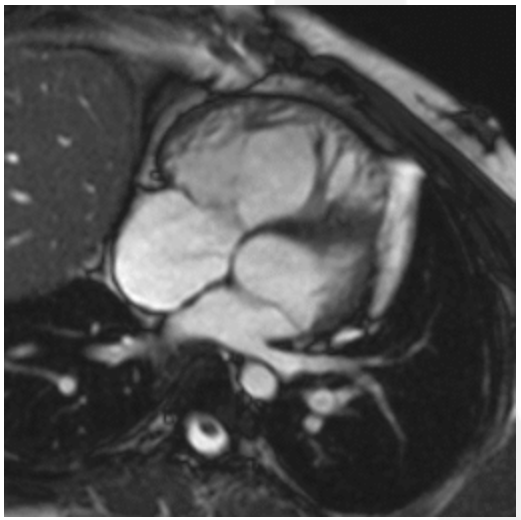
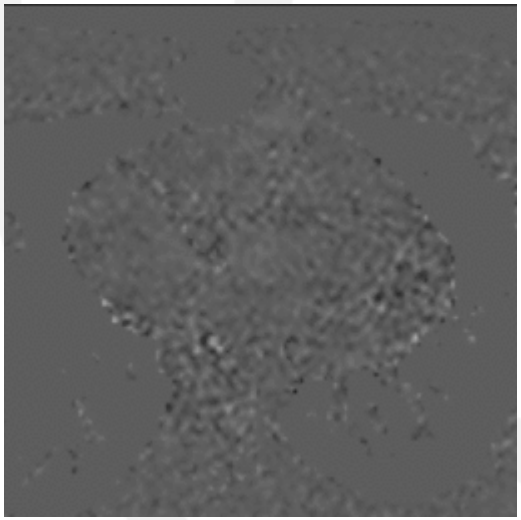
LV: EF 67, ESVi 24, EDVi 72, SVi 48, Mi 67
RV: EF 62, ESVi 28, EDVi 73, SVi 45, Mi 25

2002 Ross, LVOT membrán, Melody?

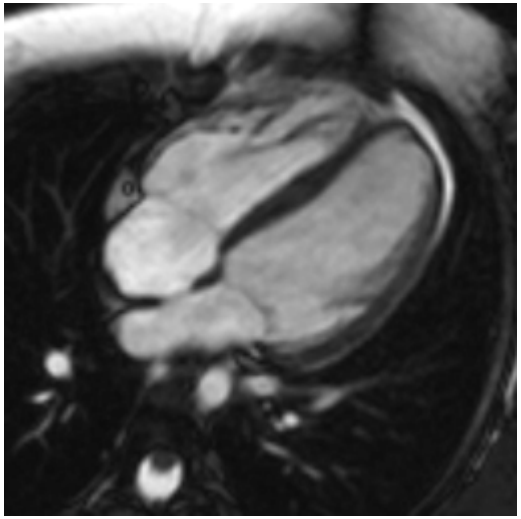
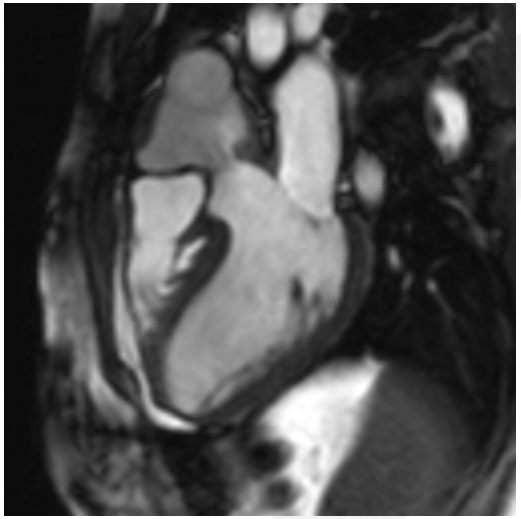
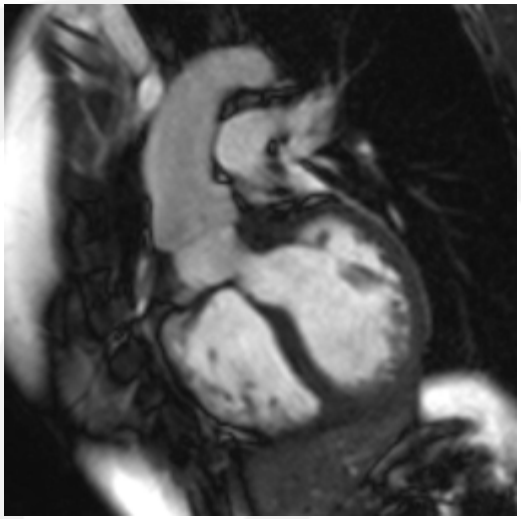
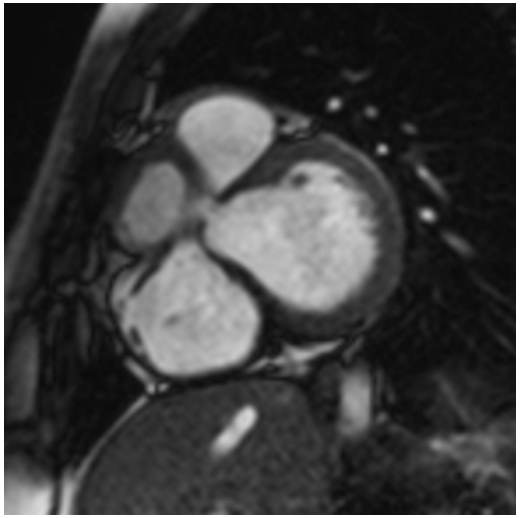
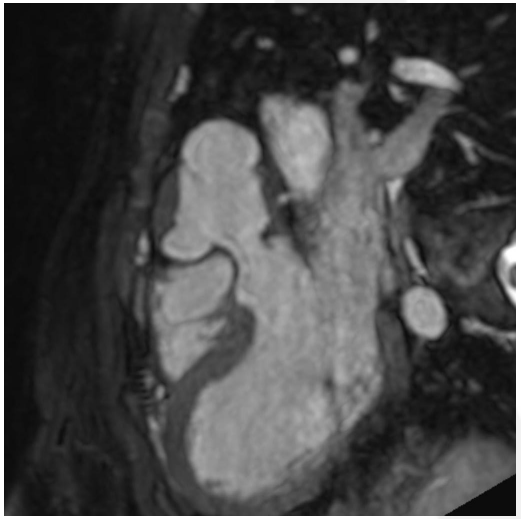
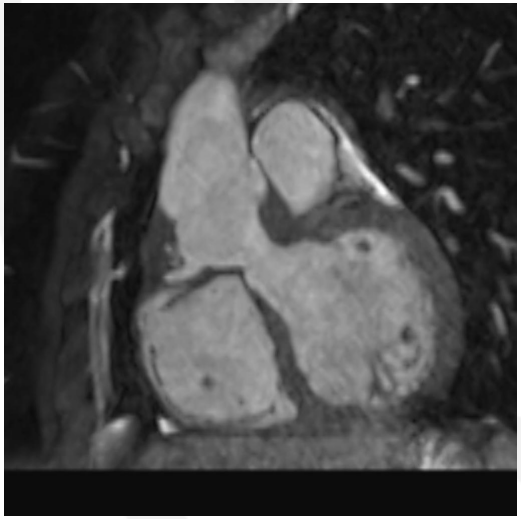







LV: EF 64-63/72, ESVi 29-30/18, EDVi 79-79/63, SVi 51-50/45, Mi 69-69/86
RV: EF 64-61/68, ESVi 29-32/18, EDVi 81-83/56, SVi 51-51/38, Mi 27-39/68

Rastelli – P: 321 0, A: 139 4, Qp/Qs: 1.29

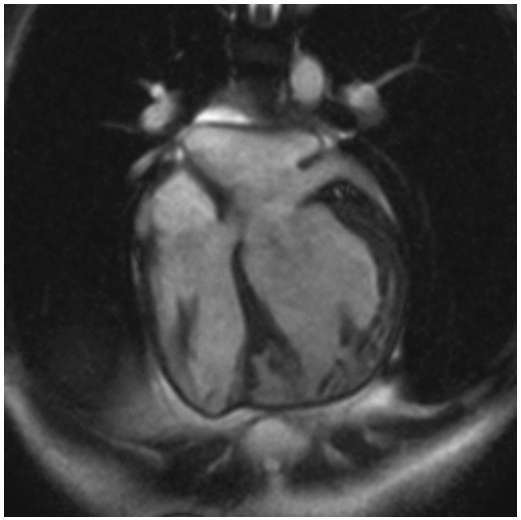
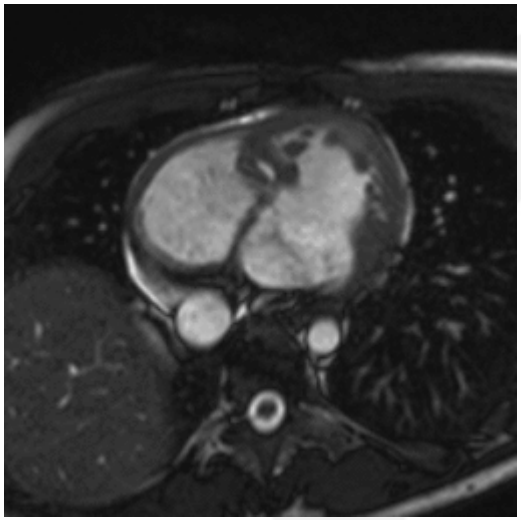
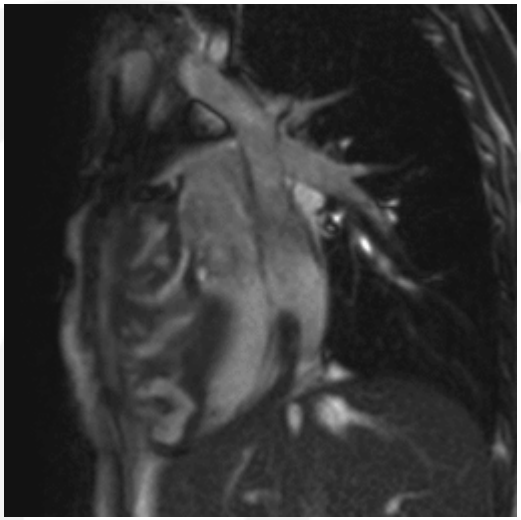
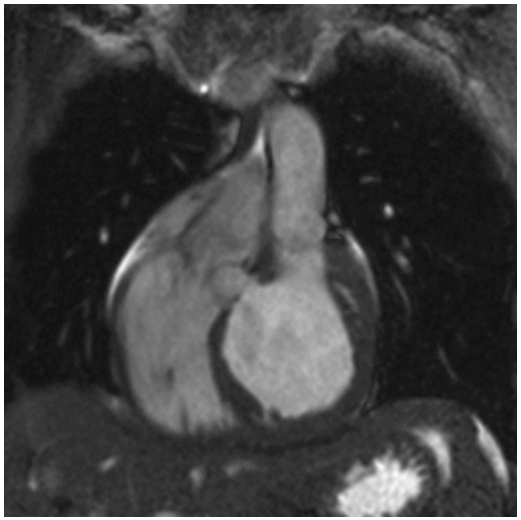
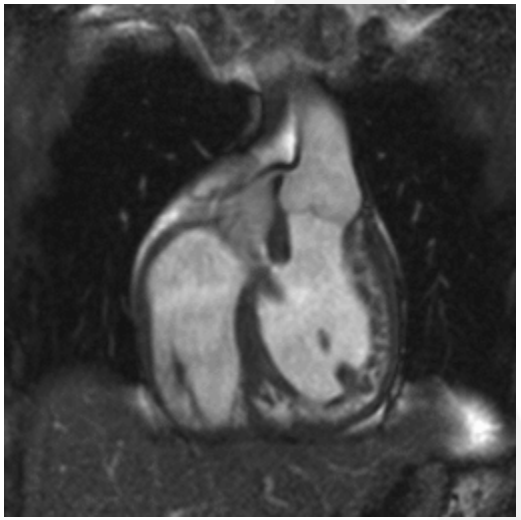
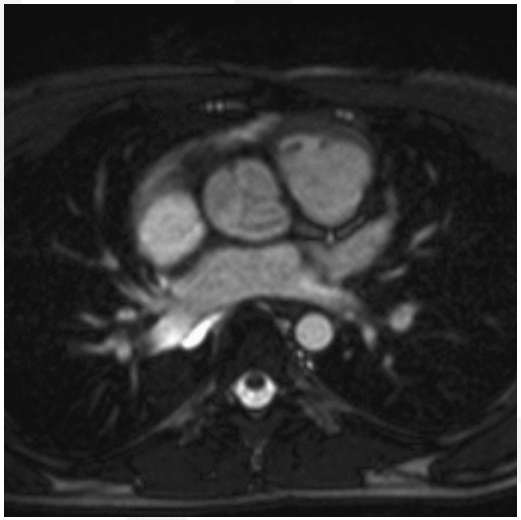







rDORV: LVOTO, 361cm/s, Qp/Qs 0.99

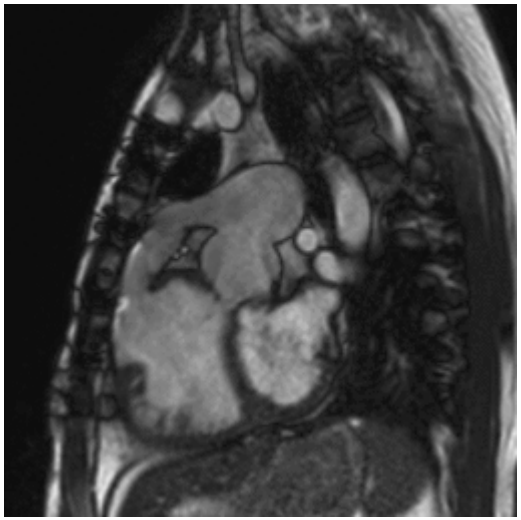
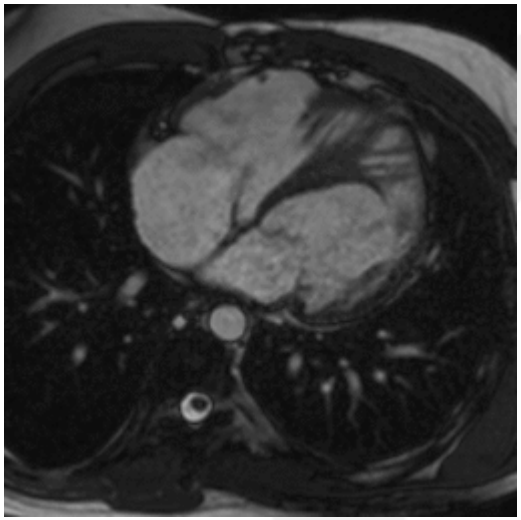
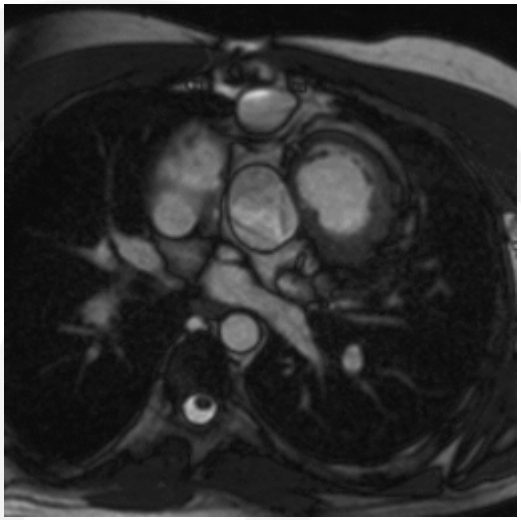
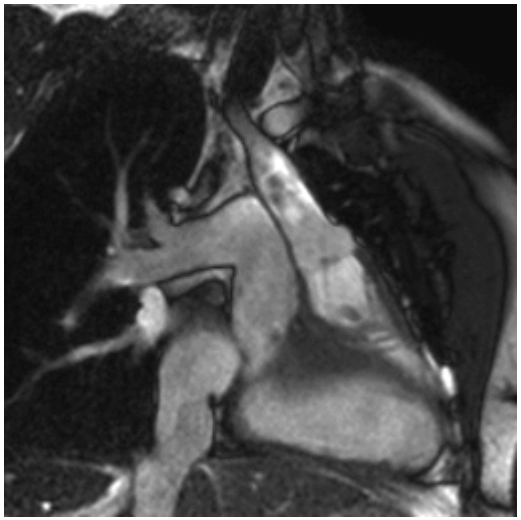
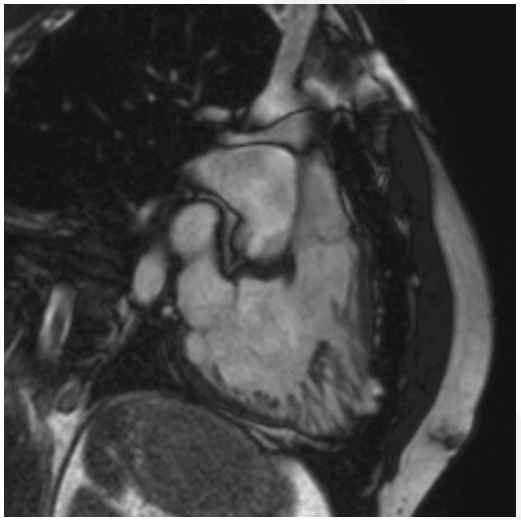
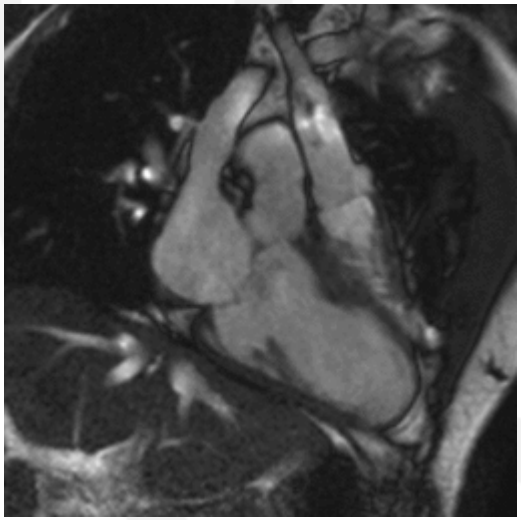
LV: EF 54/59, ESVi 39/27, EDVi 84/66, SVi 45/39, Mi 84/64
RV: EF 54/59, ESVi 34/24, EDVi 77/58, SVi 41/34, Mi 17/36

ccTGA: LVOTO, mVSD, Qp/Qs: 1.47

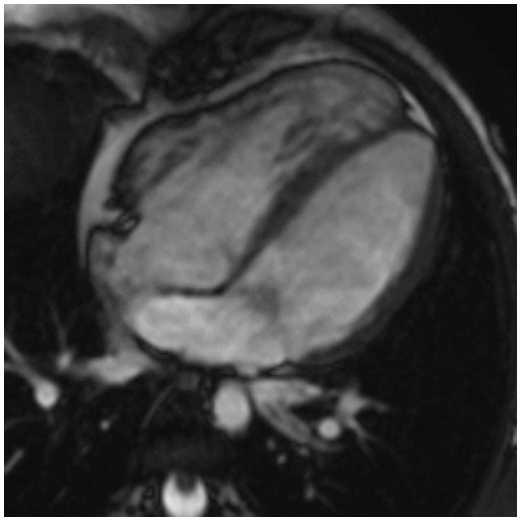
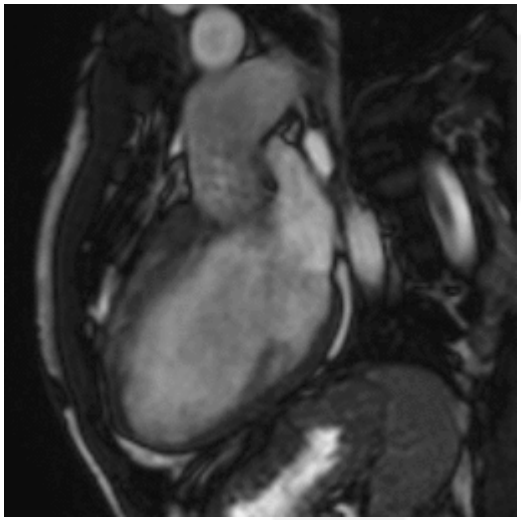
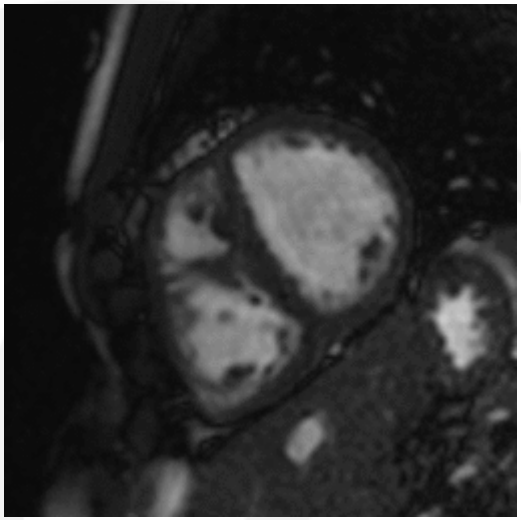
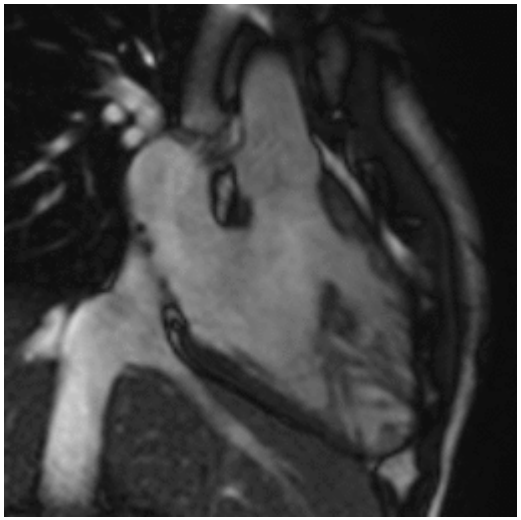
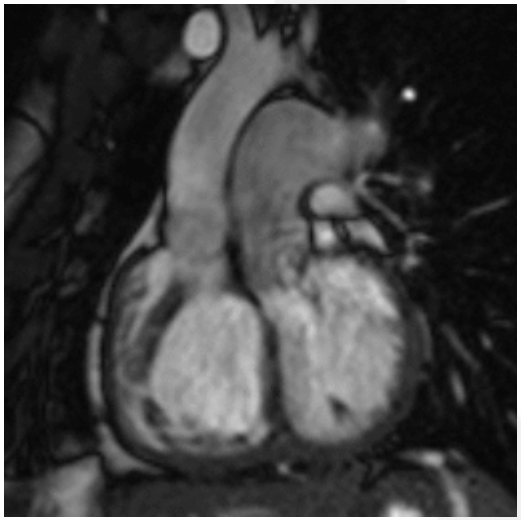
LV: EF 67, ESVi 29, EDVi 85, SVi 57, Mi 34
RV: EF 47, ESVi 82, EDVi 156, SVi 74, Mi 76

ccTGA, LVOTO, Double-Decker – HG

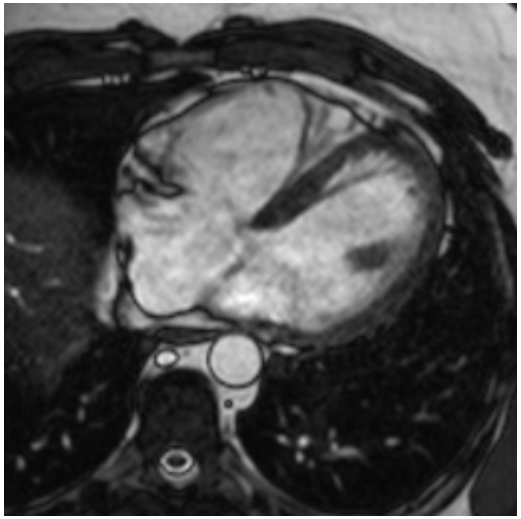
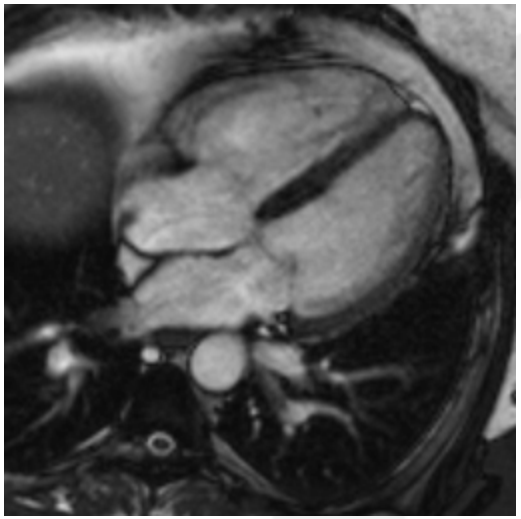
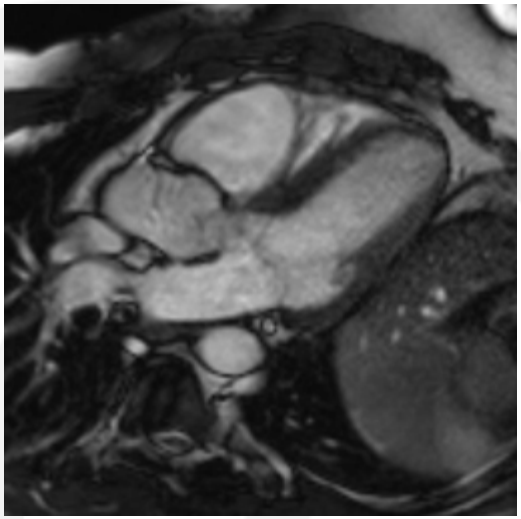
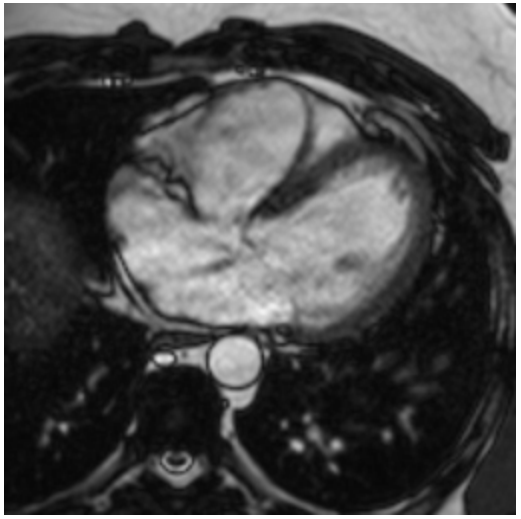
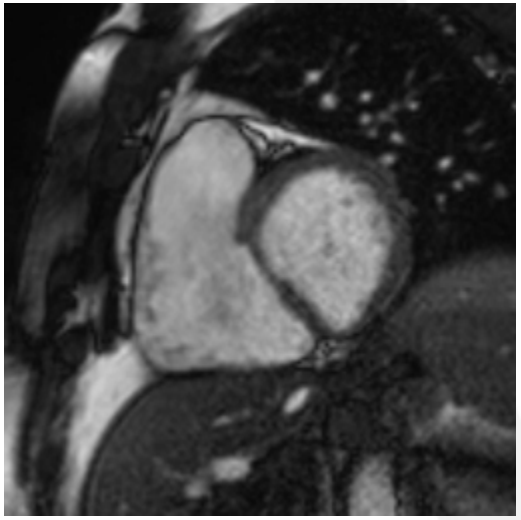
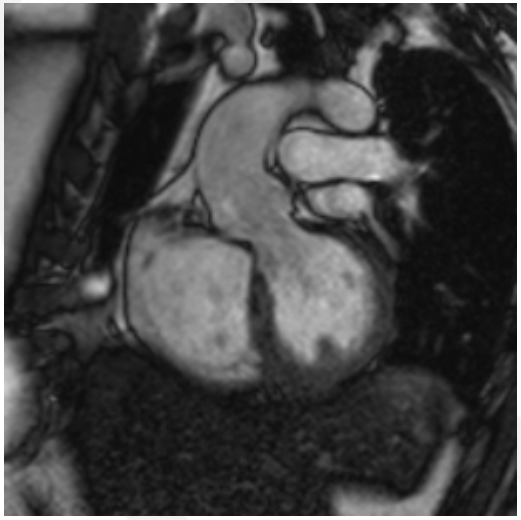







LV: EF 60/66, ESVi 58/44, EDVi 144/131, SVi 86/86, Mi 54
RV: EF 51/52, ESVi 58/55, EDVi 118/116, SVi 60/60, Mi 70

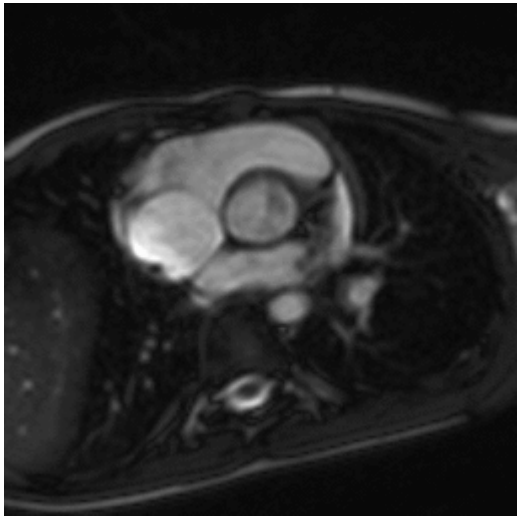
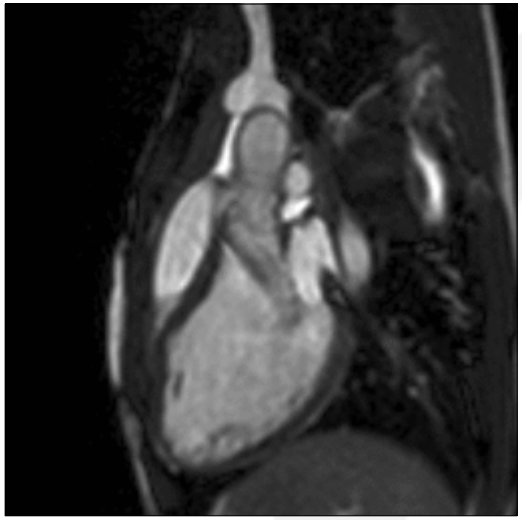
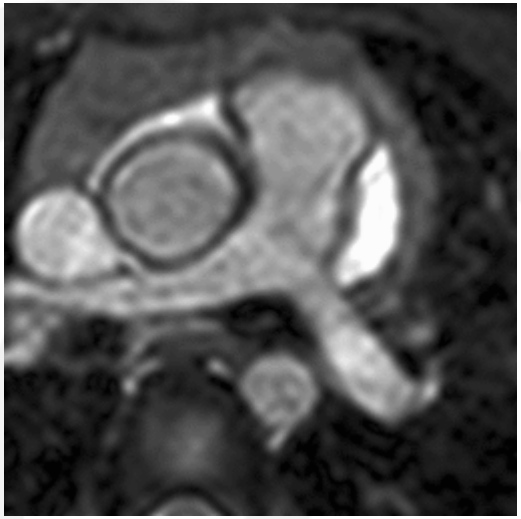
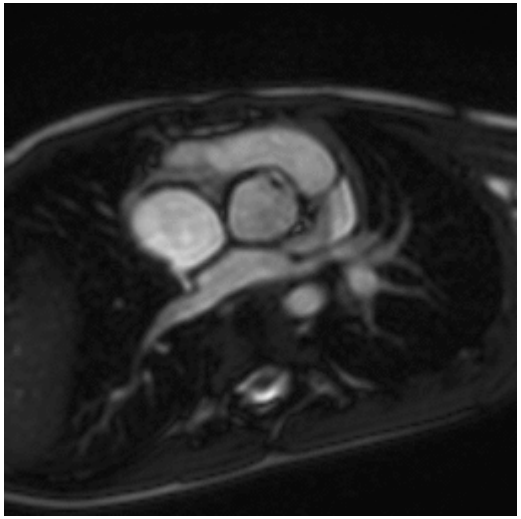
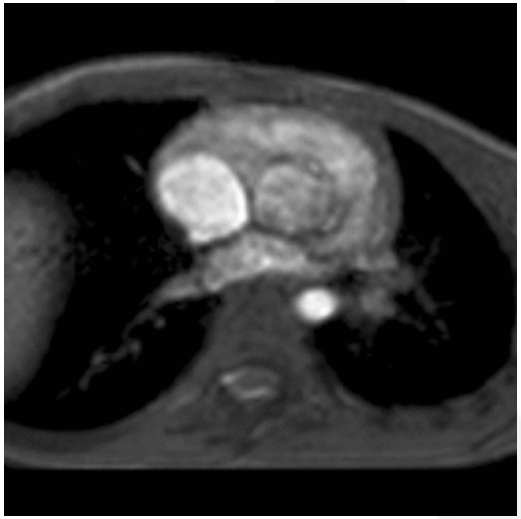
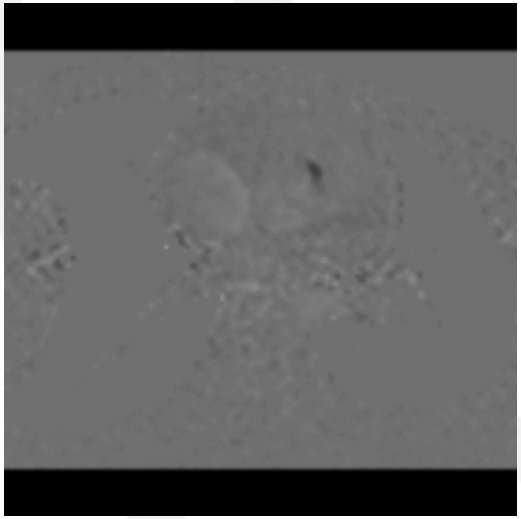
Senning, LVOTO, SAM, 265cm/s, Qp/Qs 1

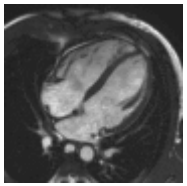

Primum ASD, mitralis cleft, Qp/Qs 1.46

AO-LV tunnel, Rf: 12%

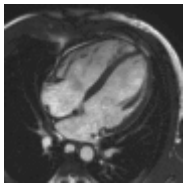







Bal kamra kiáramlási pálya: szív MR



- MR hátrányai
  - Hosszadalmas
  - Jó kooperációt igényel
  - Térbeli felbontó képessége rosszabb mind az ECHO-hoz, mind a CT-hez viszonyítva
  - Klausztrofóbia
  - Beültetett pacemaker vagy ICD akadályozhatja a képalkotást

Bal kamra kiáramlási pálya: szív MR



- Pontos, megbízható
- Jól reprodukálható
- Sugárterheléssel nem jár
- A kiáramlási pálya ábrázolásához nem kell kontrasztanyagot adni
- Jó kiegészítője lehet a ECHO-nak és a CT-nek

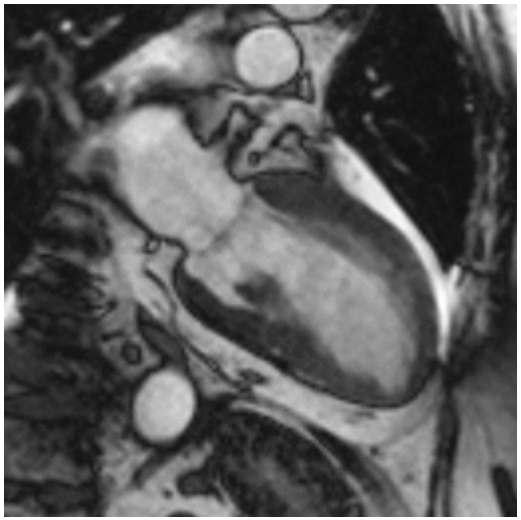
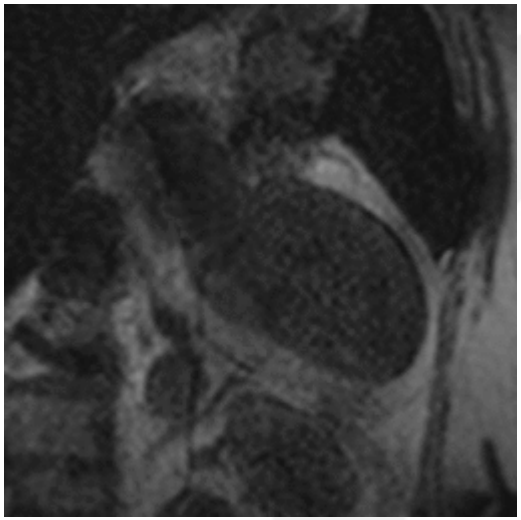
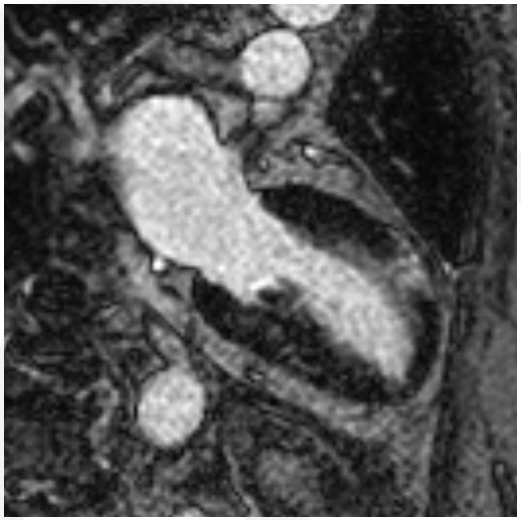
Köszönet

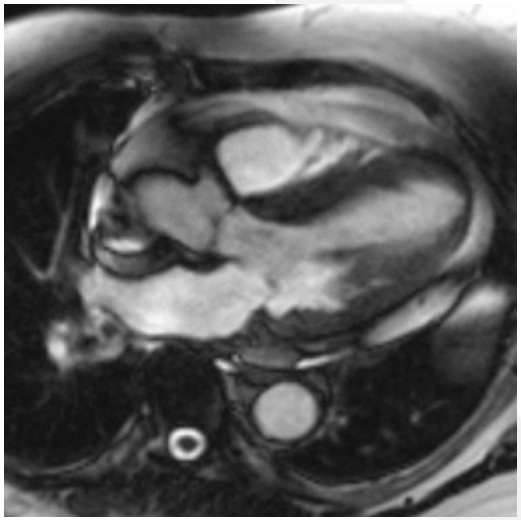
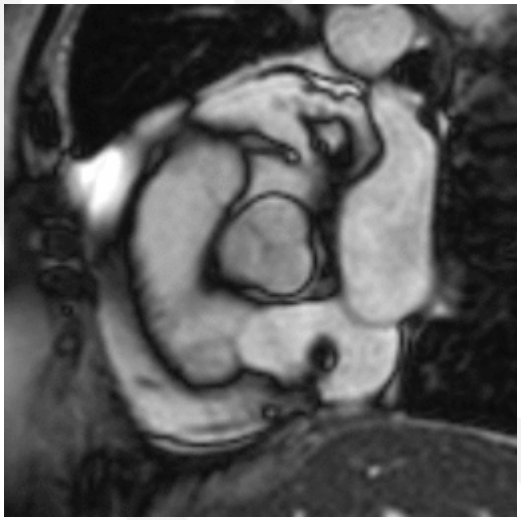
- Kádár Krisztina
- Simor Tamás
- Vágó Hajni, Merkely Béla
- Balázs Gyuri, Hüttl Kálmán
- Suhai Feri, Czimbalmos Csilla, Csécs Ibolya
- Asszisztenseink, tudományos diákkörös hallgatóink

VSZÉK – Szív MR labor

Tóth Attila – atoth@atoth.sote.hu

AMI – 63/22Hgmm, 397cm/s, 1.06cm2

LV: EF 58, ESVi 34, EDVi 82, SVi 47, Mi 92
RV: EF 60, ESVi 27, EDVi 67, SVi 40, Mi 20