

Muskuloskeletální MR protokoly

3 Tesla

Multiscan Pardubice

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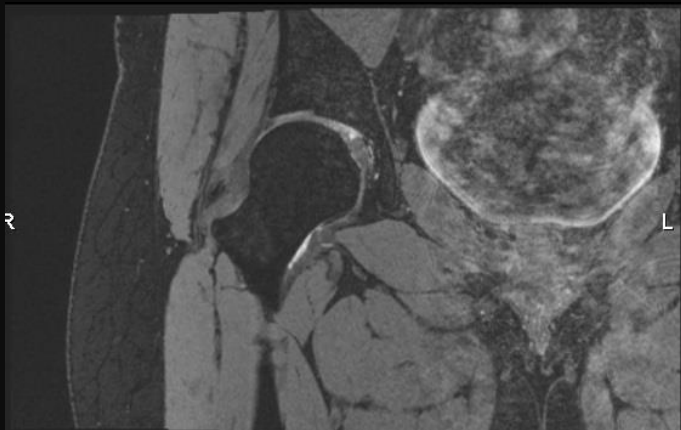
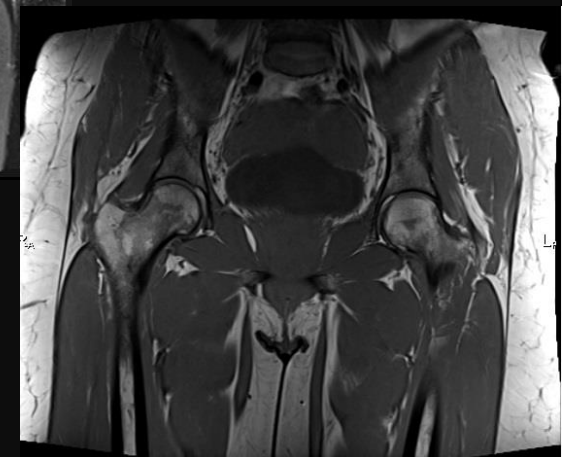
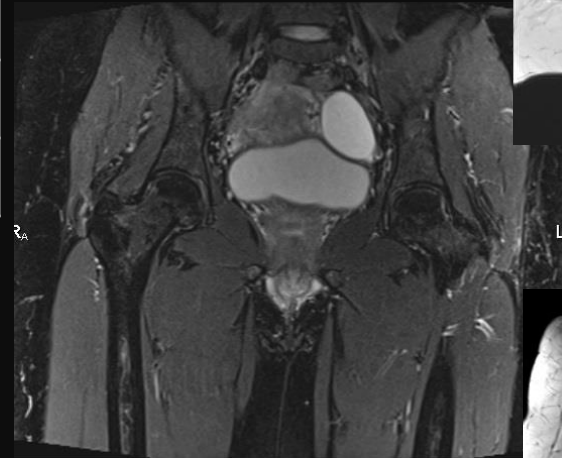
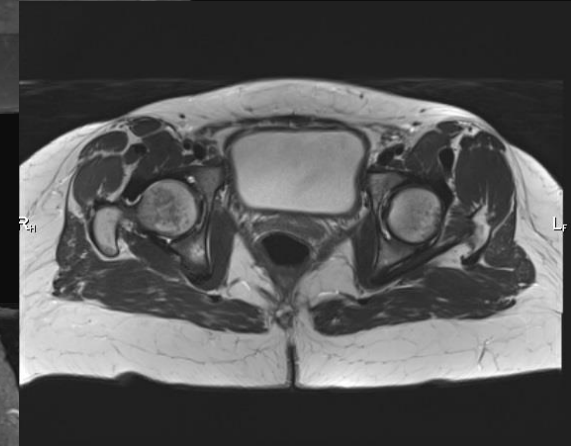
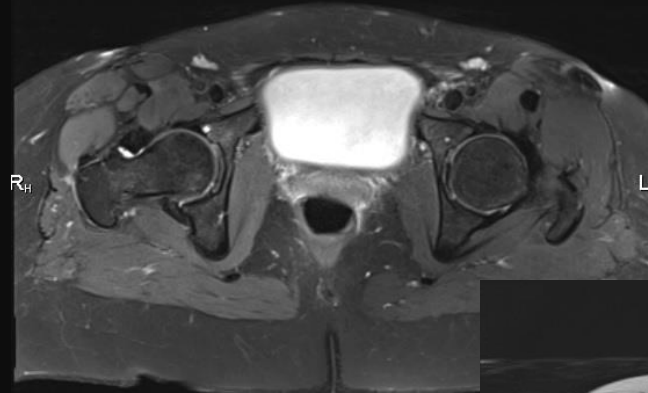
Siemens

Magnetom Skyra 3T

Kyčel 3T

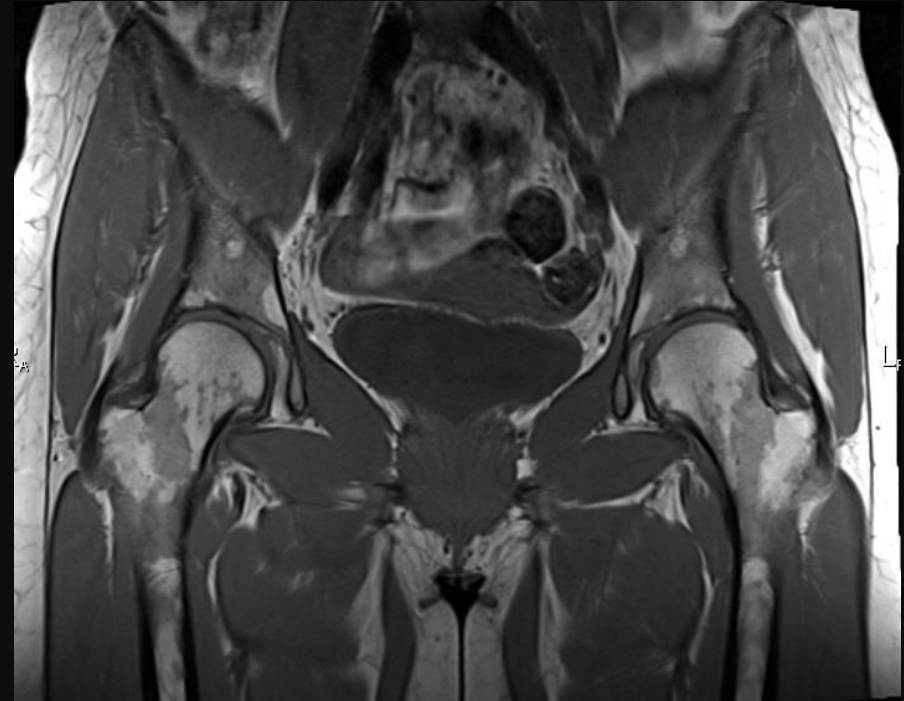
Spine 32 + Body 18

Kontrast	orientace	čas
T1	Cor	1:38
STIR	Cor	4:16
T2	Tra	4:45
PD FS	Tra	1:43
T2 3D DESS we	Cor	4:16
celkem		17:38



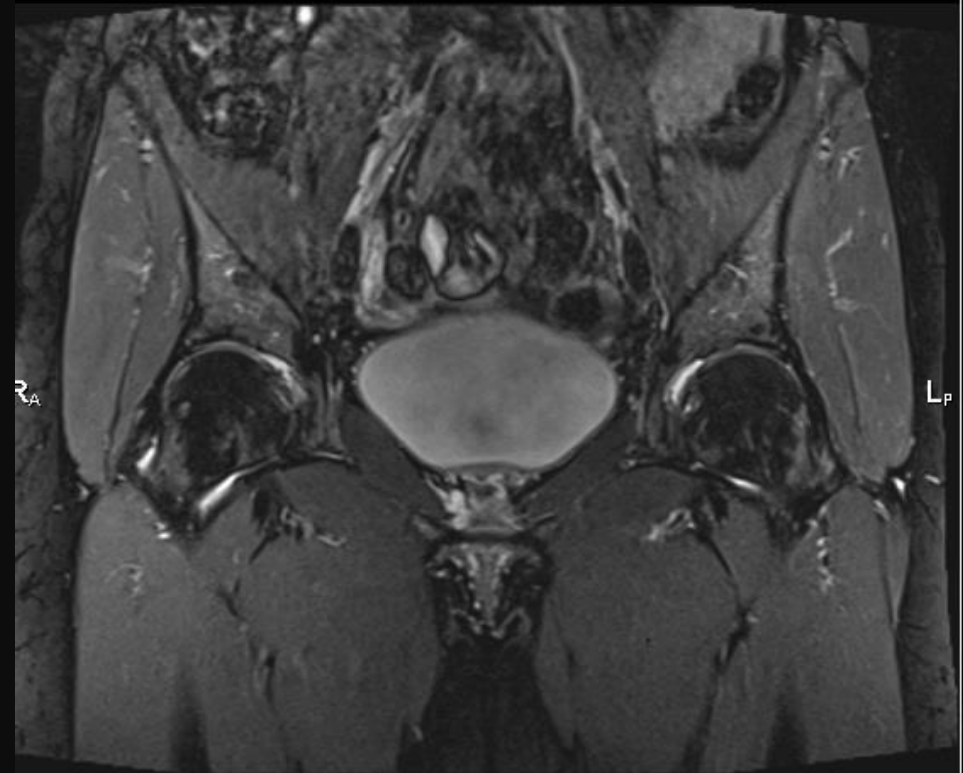
Kyčel 3 T: T1

Typ	T1
Sekvence	TSE
Rovina	Cor
Vrstva mm	3/0,3
FoV mm	350 x 280
Matrix	384 x 384, voxel: 0,7 x 0,7 x 3 mm
Fáze	R - L
PAT	2
TR ms	759
TE ms	12
ETL	4
Čas	2:59
Různé	Distortion Corr.(2D), Elliptical filter, B1 filter



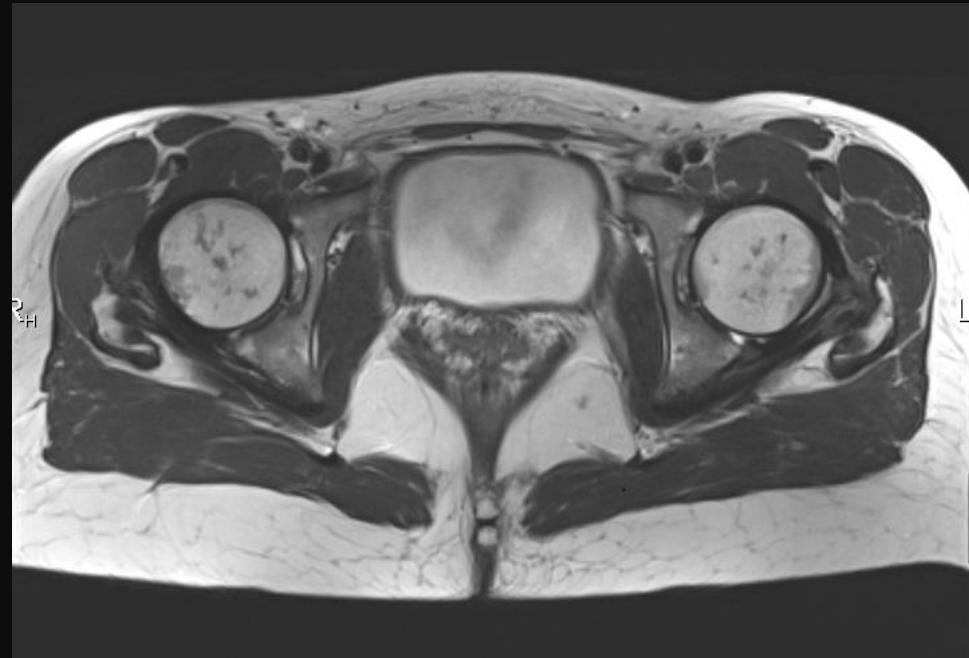
Kyčel 3 T: STIR

Typ	STIR
Sekvence	tir
Rovina	Cor
Vrstva mm	3/0,3
FoV mm	280 x 350
Matrix	300 x 320, voxel: 0,9 x 0,9 x 3 mm
Fáze	R - L
PAT	2
TR ms	3130
TE ms	29
ETL	6
Čas	3:31
Různé	Distortion Corr.(2D), Elliptical filter, B1 filter



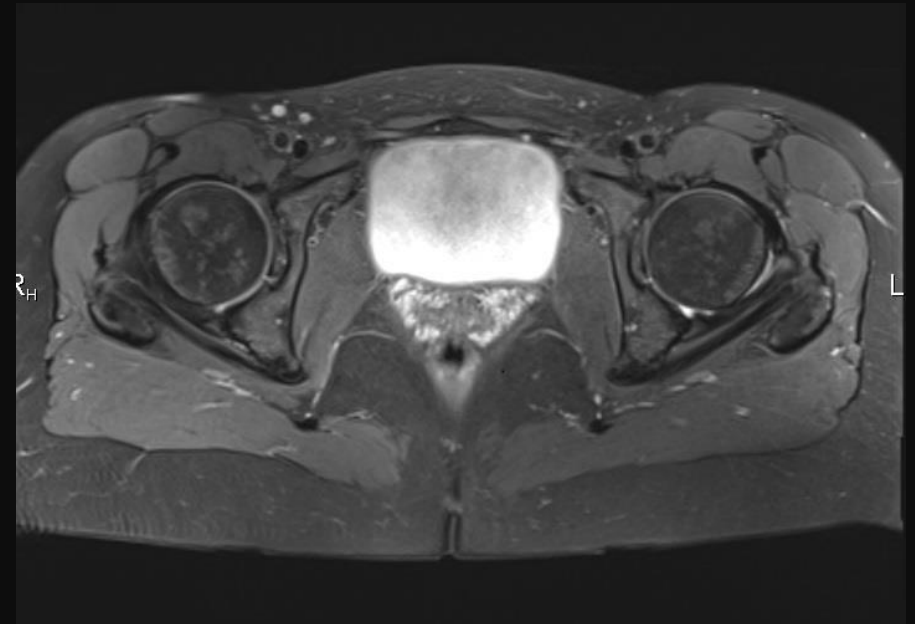
Kyčel 3 T : T2

Typ	T2
Sekvence	TSE
Rovina	Tra
Vrstva mm	3/0,3
FoV mm	280 x 350
Matrix	320 x 400, voxel: 0,9 x 0,9 x 3 mm
Fáze	R - L
PAT	2
TR ms	5500
TE ms	88
ETL	16
Čas	2:30
Různé	Distortion Corr.(2D), Prescan Normalize, Elliptical filter



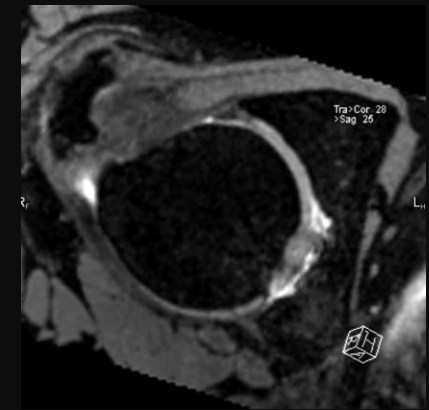
Kyčel 3 T : PD FS

Typ	PD FS
Sekvence	TSE
Rovina	Tra
Vrstva mm	3/0,3
FoV mm	280 x 350
Matrix	320 x 400, voxel: 0,9 x 0,9 x 3 mm
Fáze	R - L
PAT	2
TR ms	5090
TE ms	35
ETL	8
Čas	4:06
Různé	Distortion Corr.(2D), Prescan Normalize, Elliptical filter



Kyčel 3 T: T2 dess3D we

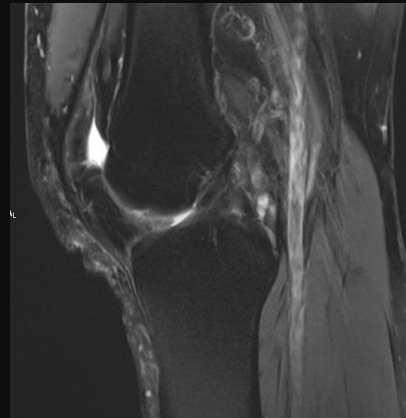
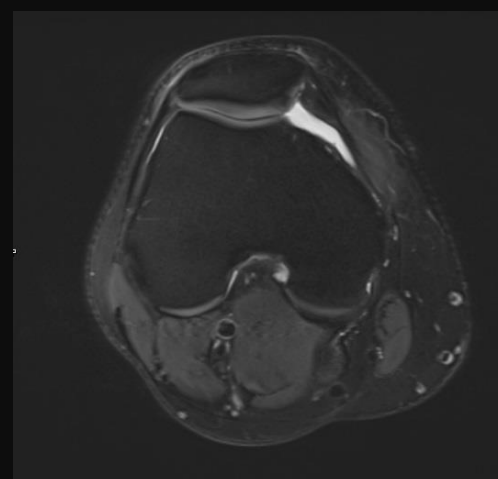
Typ	T2 dess3D we
Sekvence	de
Rovina	Cor
Vrstva mm	0,7
FoV mm	280
Matrix	384 x 216 voxel: 0,7 x 0,7 x 0,8 mm
Fáze	F - H
PAT	2
TR ms	15,5
TE ms	5,1
ETL	2
Čas	5:31
Různé	Distortion Corr.(2D), Prescan Normalize, Water Excitation



Koleno 3T

Tx/Rx knee 15

Kontrast	orientace	čas
T1	Cor	1:38
PD FS	Cor	4:16
PD FS	Tra	4:45
PD FS	Sag	1:43
T2 3D DESS we	Sag	4:16
celkem		16:38



Koleno 3T: T1

Typ	T1
Sekvence	TSE
Rovina	Cor
Vrstva mm	3/0,3
FoV mm	160
Matrix	384 x 288, voxel: 0,4 x 0,6 x 3 mm (384 x 384, 0,4 x 0,4 x 3 mm)
Fáze	R - L
PAT	2
TR ms	625
TE ms	17
ETL	3
Čas	1:38
Různé	Distortion Corr.(2D), Prescan Normalize, Elliptical filter



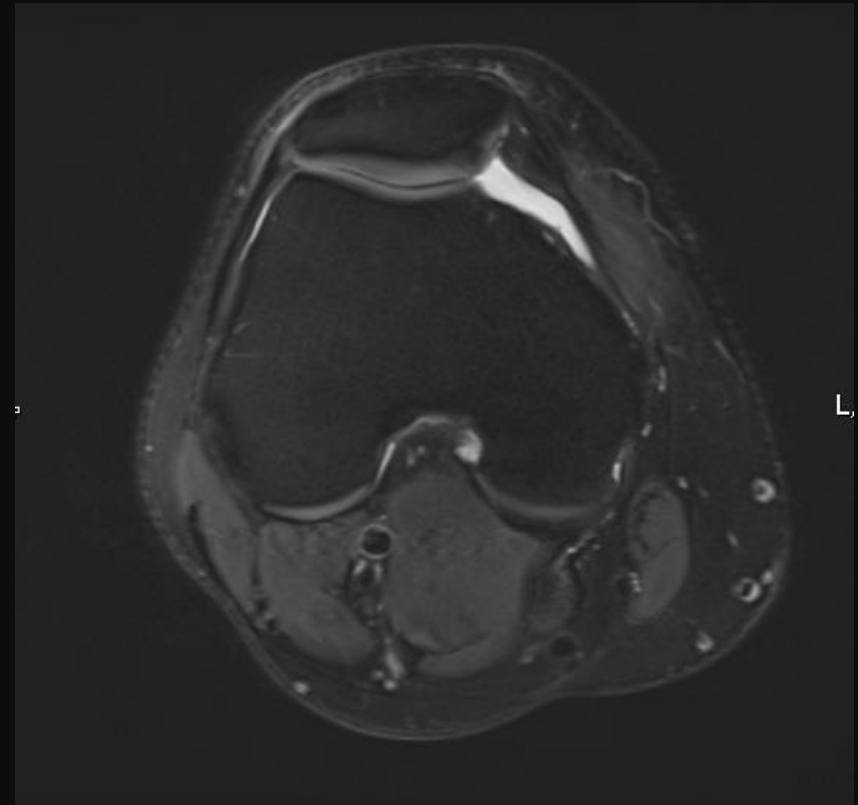
Koleno 3T: PD FS

Typ	PD FS
Sekvence	TSE
Rovina	Cor
Vrstva mm	3/0,3
FoV mm	160
Matrix	320 x 240, voxel: 0,5 x 0,8 x 3 mm (320 x 320, 0,5 x 0,5 x 3 mm)
Fáze	F - H
PAT	-
TR ms	3850
TE ms	41
ETL	10
Čas	4:16
Různé	



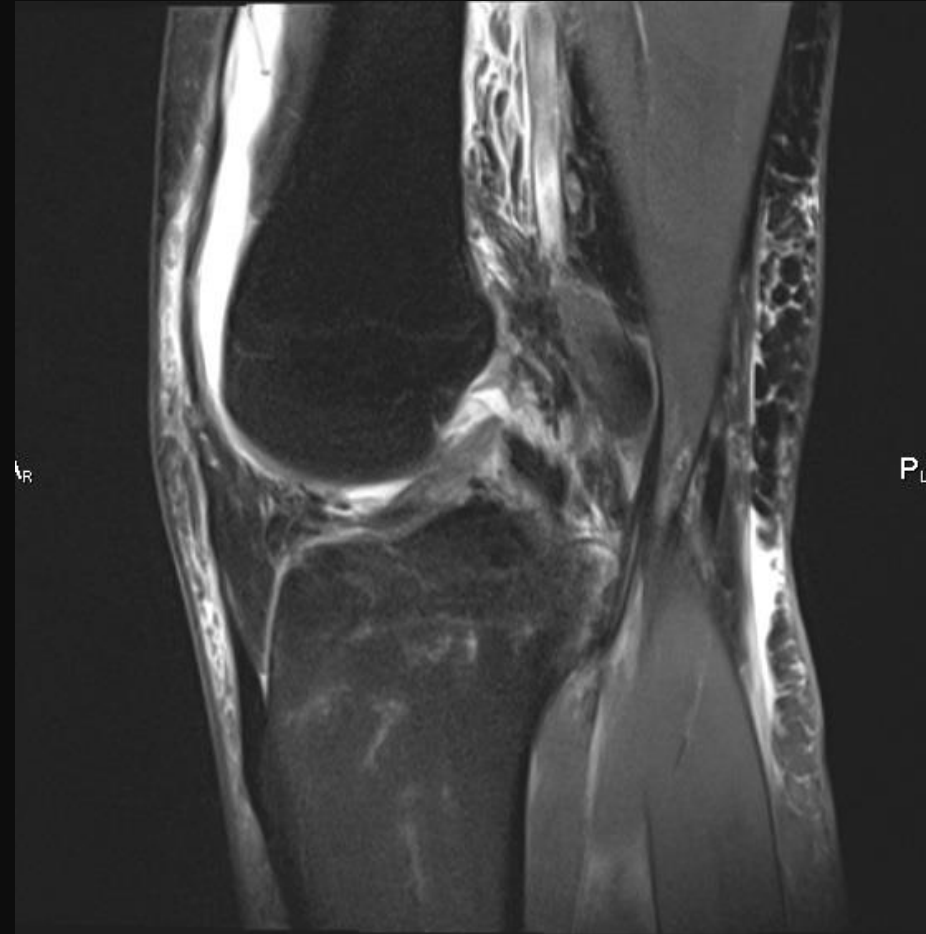
Koleno 3T: PD FS

Typ	PD FS
Sekvence	TSE
Rovina	Tra
Vrstva mm	3
FoV mm	160
Matrix	320 x 256, voxel: 0,5 x 0,7 x 3 mm (320 x 320, 0,5 x 0,5 x 3 mm)
Fáze	R - L
PAT	-
TR ms	4890
TE ms	37
ETL	11
Čas	4:45
Různé	Distortion Corr.(2D), Prescan Normalize, Elliptical filter



Koleno 3T: PD FS

Typ	PD FS
Sekvence	TSE
Rovina	Sag
Vrstva mm	3/0,3
FoV mm	160
Matrix	384 x 288, voxel: 0,4 x 0,6 x 3 mm
Fáze	H - F
PAT	2
TR ms	4230
TE ms	34
ETL	14
Čas	1:43
Různé	Distortion Corr.(2D), Prescan Normalize, Elliptical filter



Koleno 3T: T2 3D dess we

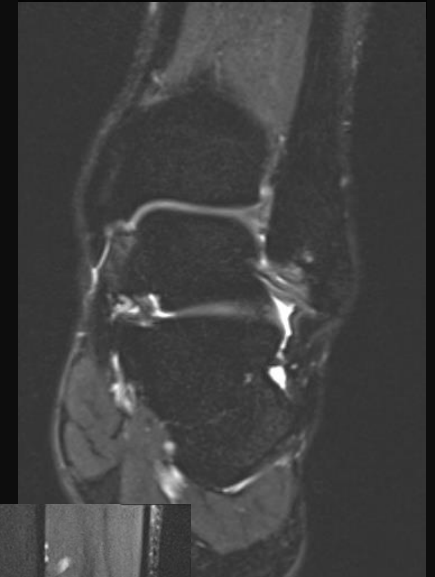
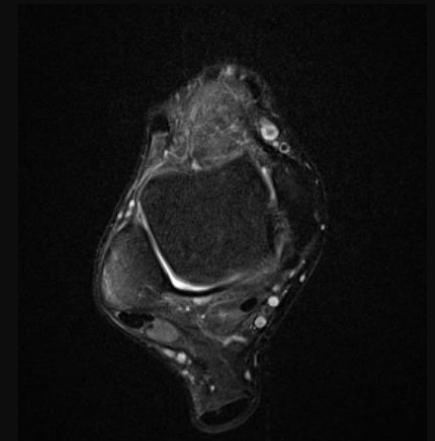
Typ	T2 3D DESS we iso
Sekvence	3D dess we
Rovina	Sag
Vrstva mm	0,6
FoV mm	160
Matrix	256 x 256, voxel: 0,6 x 0,6 x 0,6 mm
Fáze	A - P
PAT	2
TR ms	14,8
TE ms	5,04
ETL	2
Čas	4:16
Různé	Distortion Corr.(2D), Prescan Normalize, Elliptical filter, Water Excitation



Hlezo 3T

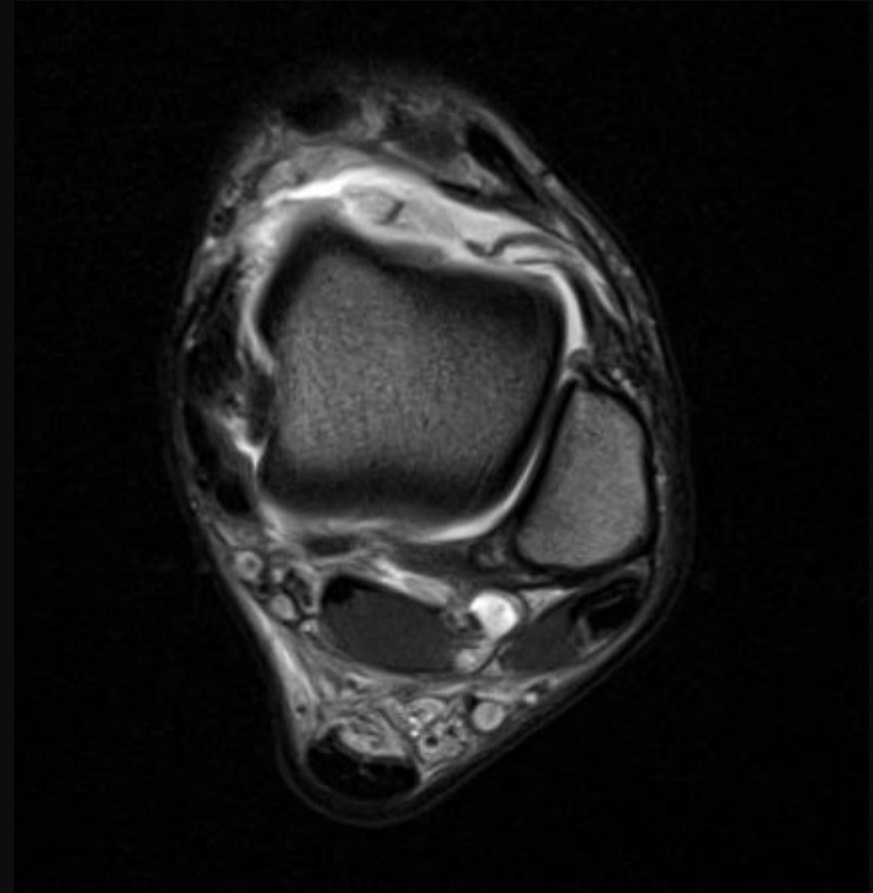
Flex coil

Kontrast	orientace	čas
T2	Tra	2:43
T1	Cor	3:43
STIR	Cor	3:53
PD FS	Tra	3:25
PD FS	Sag	3:37
celkem		17:21



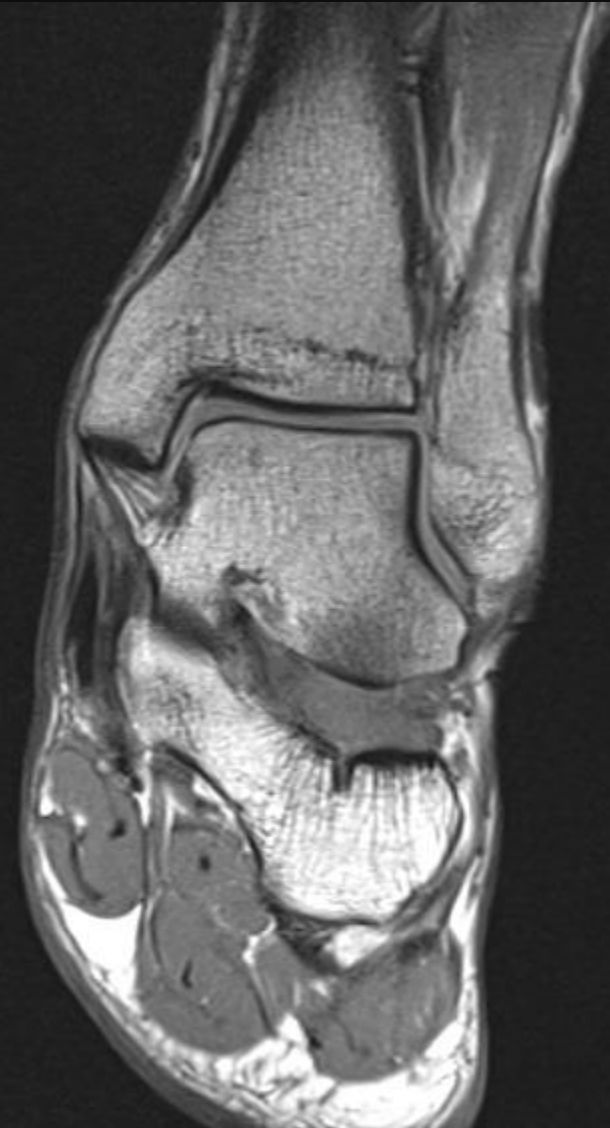
Hlezno 3T: T2

Typ	T2
Sekvence	TSE
Rovina	Tra
Vrstva mm	3/0,6
FoV mm	160
Matrix	384 x 384, voxel: 0,4 x 0,4 x 3 mm
Fáze	R - L
PAT	-
TR ms	4490
TE ms	57
ETL	11
Čas	2:43
Různé	Distortion Corr.(2D), Prescan Normalize, Elliptical filter



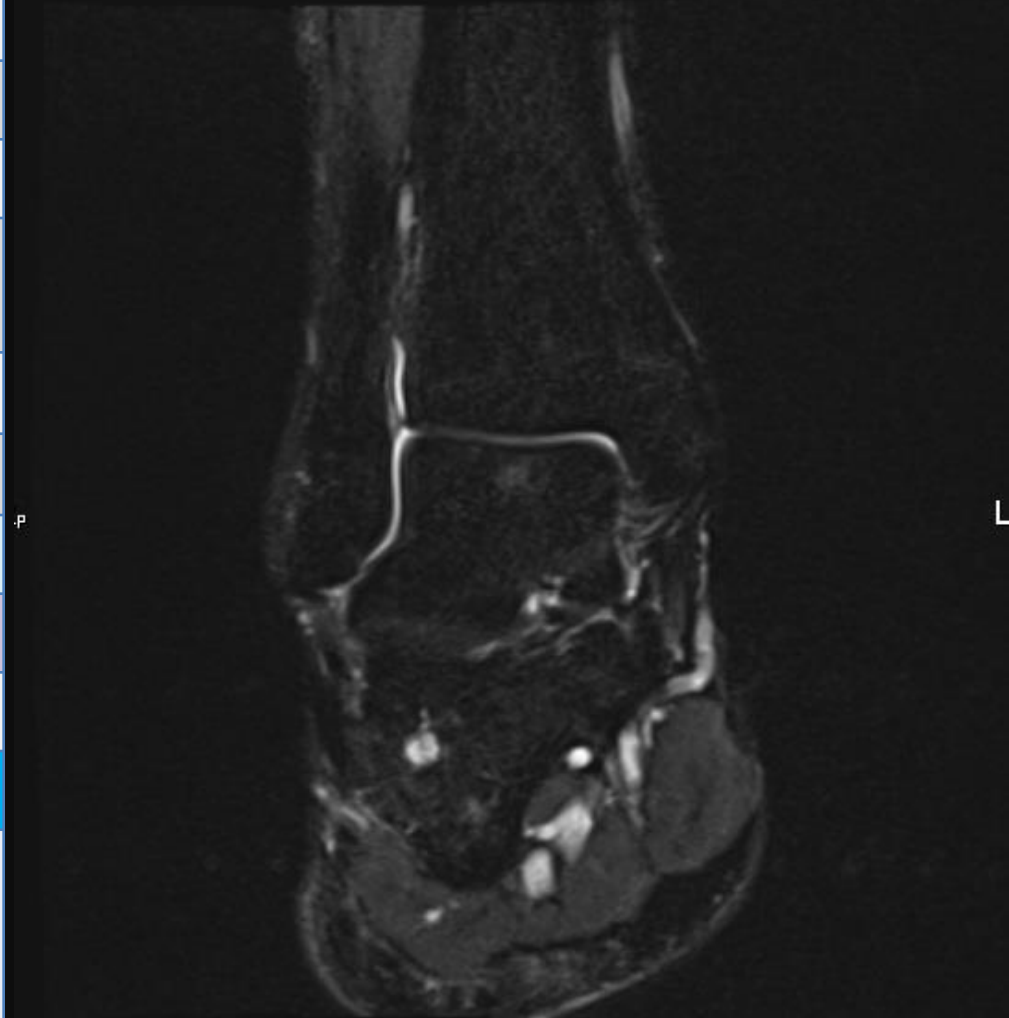
Hlezno 3T: T1

Typ	T1
Sekvence	TSE
Rovina	Cor
Vrstva mm	3/0,6
FoV mm	160
Matrix	384 x 307, voxel: 0,4 x 0,5 x 3 mm (384 x 384, 0,4 x 0,4 x 3 mm)
Fáze	R - L
PAT	-
TR ms	630
TE ms	14
ETL	3
Čas	3:43
Různé	Distortion Corr.(2D), Prescan Normalize



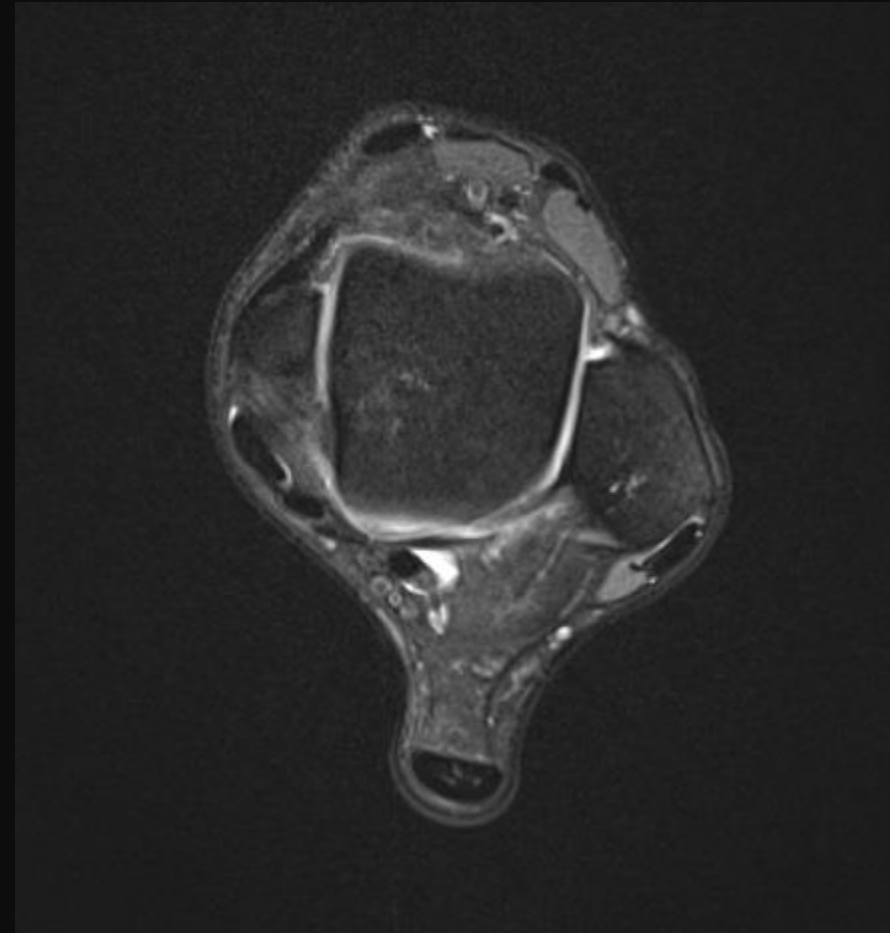
Hlezno 3 T: STIR

Typ	STIR
Sekvence	tir
Rovina	Cor
Vrstva mm	3/0,6
FoV mm	160
Matrix	320 x 256, voxel: 0,5 x 0,6 x 3 mm (320 x 320, 0,5 x 0,5 x 3 mm)
Fáze	R - L
PAT	-
TR ms	500
TE ms	36
ETL	12
Čas	3:53
Různé	Distortion Corr.(2D), Prescan Normalize, Elliptical filter



Hlezno 3T: PD FS

Typ	PD FS
Sekvence	TSE
Rovina	Tra
Vrstva mm	3/0,6
FoV mm	160
Matrix	384 x 384, voxel: 0,4 x 0,4 x 3 mm
Fáze	A - P
PAT	2
TR ms	3450
TE ms	43
ETL	7
Čas	3:25
Různé	Distortion Corr.(2D), Prescan Normalize,



Hlezno 3T: PD FS

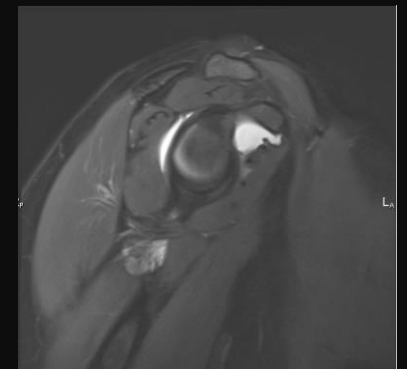
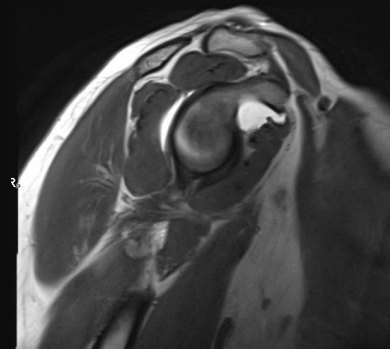
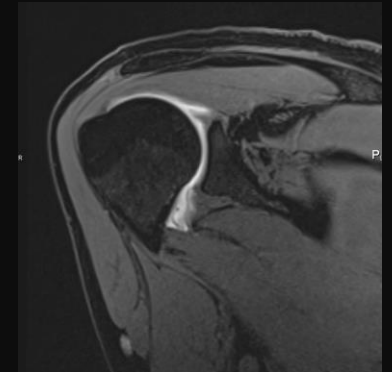
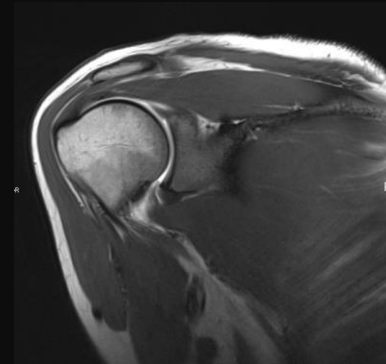
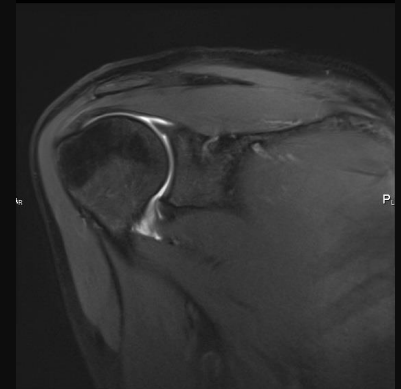
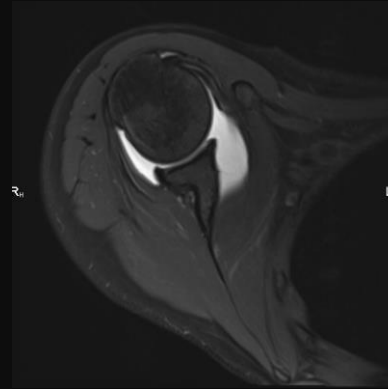
Typ	PD FS
Sekvence	TSE
Rovina	Sag
Vrstva mm	3/0,6
FoV mm	160
Matrix	384 x 384, voxel: 0,4 x 0,4 x 3 mm
Fáze	A - P
PAT	2
TR ms	3660
TE ms	43
ETL	7
Čas	3:37
Různé	Distortion Corr.(2D), Prescan Normalize



Rameno

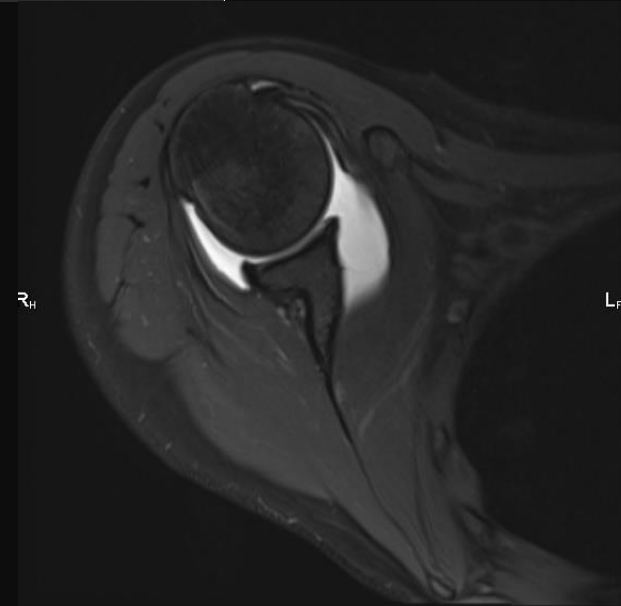
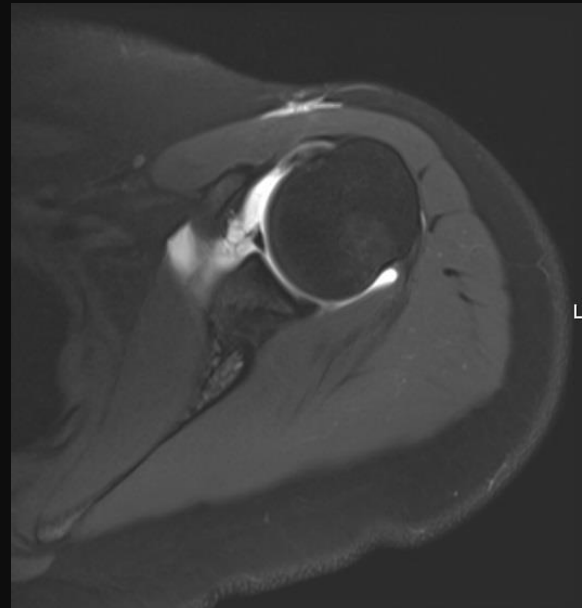
Shoulder Large 16
Shoulder Small 16

Kontrast	orientace	čas
PD tse fs	Tra	2:41
PD tse fs	Cor	2:32
T1 tse	Cor	3:41
PD tse dixon	Sag	3:44
T1 vibe we	Cor	3:31
celkem		16:09



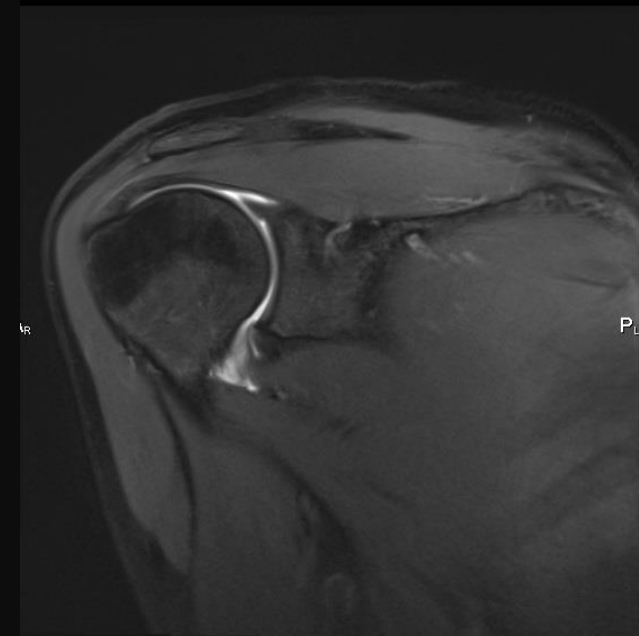
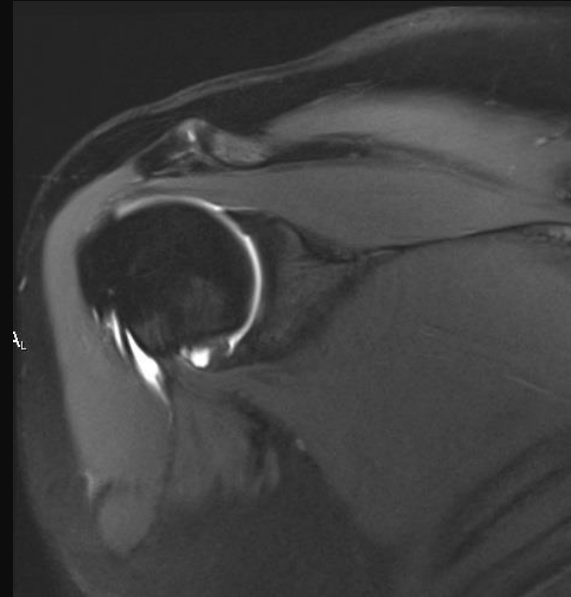
Rameno PD FS Tra

Typ	PD FS
Sekvence	TSE
Rovina	Tra
Vrstva	3/0,3 mm
FoV mm	160
Matrix	320 x 240, voxel 0,5 x 0,7 x 3 mm (320 x 320, 0,5 x 0,5 x 3 mm)
Fáze	A-P
PAT	-
TR ms	3000
TE ms	33
ETL	8
Čas	2:41
Různé	Distortion Corr.(2D), Prescan Normalize, Elliptical filter



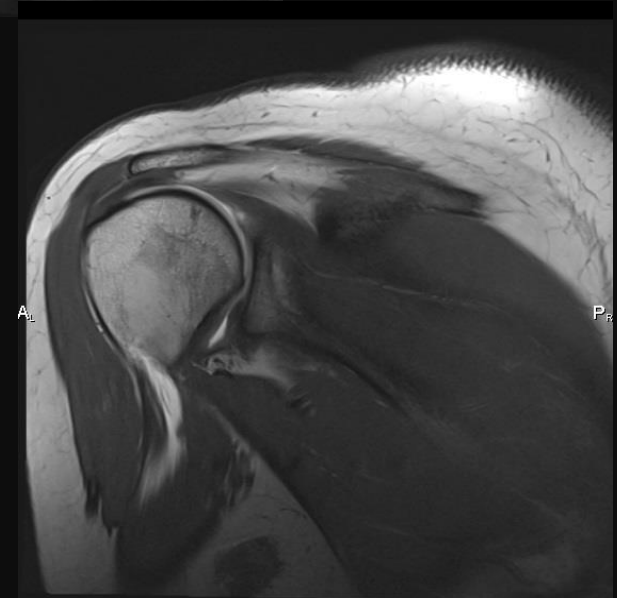
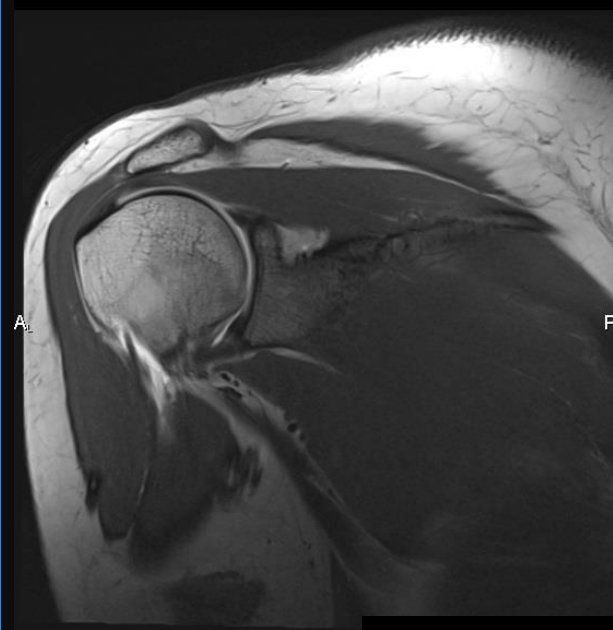
Rameno PD FS COR

Typ	PD
Sekvence	TSE
Rovina	Šikmá Cor
Vrstva mm	3/0,3
FoV mm	160
Matrix	384 x 384, voxel: 0,4 x 0,4 x 3 mm
Fáze	A-P
PAT	2
TR ms	3960
TE ms	29
ETL	11
Čas	2:32
Různé	Distortion Corr.(2D),



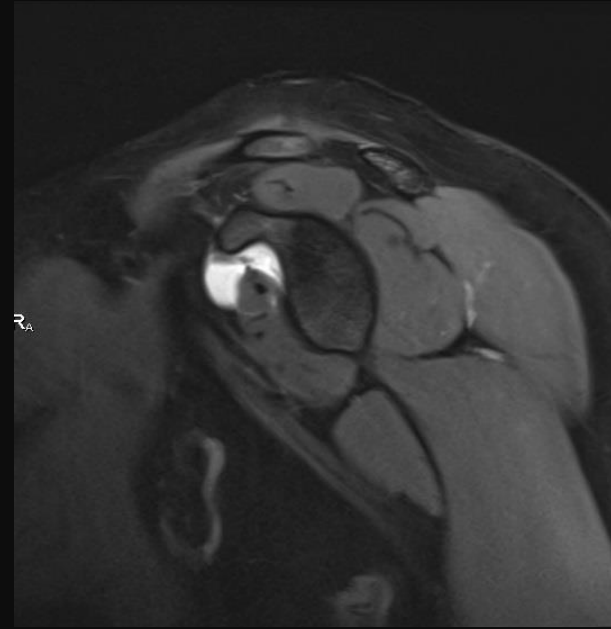
Rameno T1 COR

Typ	T1
Sekvence	TSE
Rovina	Šikmá Cor
Vrstva	3/0,3
FoV mm	160
Matrix	448 x 358, voxel: 0,4 x 0,6 x 3 mm (448 x 448, 0,4 x 0,4 x 3 mm)
Fáze	A-P
PAT	2
TR ms	605
TE ms	13
ETL	4
Čas	3:41
Různé	Distortion Corr.(2D), Prescan Normalize, Elliptical filter



Rameno PD dixon Sag

Typ	PD dixon
Sekvence	TSE
Rovina	Šikmá Sag
Vrstva	3/0,3
FoV mm	160
Matrix	320 x 240, voxel: 0,5 x 0,7 x 3 mm (320 x 320, 0,4 x 0,4 x 3 mm)
Fáze	R-L
PAT	2
TR ms	3000
TE ms	38
ETL	14
Čas	3:44
Různé	Distortion Corr.(2D), Elliptical filter



Rameno T1 VIBE WE COR

Typ	3D GRE we iso
Sekvence	Vibe we
Rovina	Šikmá Cor
Vrstva mm	0,6
FoV mm	160
Matrix	256 x 256, voxel: 0,6 x 0,6 x 0,6 mm
Fáze	R-L
PAT	2
TR ms	11
TE ms	4,92
ETL	1
Čas	3:31
Různé	Distortion Corr.(2D), Water Excitation

