MRCP (MR CHOLANGIOPANCREATOGRAPHY) 1.5T

INSTRUCTIONS AND PATIENT PREPARATION

Instructions	• NPO 4 hours, give patient one cup of pineapple juice prior to the scan • Cover entire liver and pancreas
Common Indications	Biliary stones or obstruction, follow up of pancreatic cystic lesions
Position	Supine; head or feet first
Coil	Body Array (anterior); Spine Array (posterior) - Be sure ISO, AUTO-COIl SELECT is on
Landmark	Xyphoid. Center in the middle of Body Array coil. Table can be re-centered following the localizer

CONTRAST AGENT PARAMETERS

Contrast Agent	Dose	Injection Rate	Dose Timing Method and Scan Delay
Gadopiclenol (VUEWAY)	0.05 mmol/kg	2 mL/sec	Use CareBolus (CB) to track contrast to diaphragm; stop CB; perform breath hold (BH) command (~6 sec); start Arterial phase acquisition
Saline Flush	20 mL	2 mL/sec	—
Comments	• Report agent administered and dose • Use minimal dose for patients with a GFR <30 mL/sec		

IMAGING PARAMETERS

Scan Description	LOCALIZER	CORONAL T2 HASTE	AXIAL T2 HASTE	AXIAL 3D IN OUT CAIPI	CORONAL Thick Slab RADIAL	MRCP PACE HASTE	AXIAL T1 VIBE Pre CAIPI	Care Bolus	AXIAL T1 VIBE Post CAIPI Double Arterial	AXIAL T1 VIBE Post CAIPI 60 sec 180 sec	CORONAL T1 VIBE Post Fat Sat 180 sec	AXIAL DWI Bipolar
Sequence Name	fl	h_rr	h	fl	h	tseR	fl	fl	fl	fl	fl	epse
Dimension	2D	2D	2D	3D	2D	3D	3D	2D	3D	3D	3D	—
Acceleration Mode	GRAPPA	GRAPPA	GRAPPA	CAIPIRINHA	None	GRAPPA	CAIPIRINHA	None	CAIPIRINHA	CAIPIRINHA	CAIPIRINHA	GRAPPA
Acceleration Factor PE	2	3	2	2	—	3	2	—	2	2	2	2

SCAN PARAMETERS

Scan Description	LOCALIZER	CORONAL T2 HASTE	AXIAL T2 HASTE	AXIAL 3D IN OUT CAIPI	CORONAL Thick Slab RADIAL	MRCP PACE HASTE	AXIAL T1 VIBE Pre CAIPI	Care Bolus	AXIAL T1 VIBE Post CAIPI Double Arterial	AXIAL T1 VIBE Post CAIPI 60 sec 180 sec	CORONAL T1 VIBE Post Fat Sat 180 sec	AXIAL DWI Bipolar
TR	7.4 ms	1100 ms	1100 ms	6.8 ms	4500 ms	2500 ms	4.2 ms	60.51 ms	4.2 ms	4.2 ms	4.9 ms	6700 ms
TE	3.69 ms	101 ms	98 ms	1: 2.39 ms 2: 4.77 ms	655 ms	701 ms	1.81 ms	1.45 ms	1.81 ms	1.81 ms	2.41 ms	76 ms
Flip Angle	20 deg	180 deg	180 deg	10 deg	150 deg	180 deg	10 deg	30 deg	10 deg	10 deg	10 deg	—
Turbo Factor	—	288	234	—	269	120	—	—	—	—	—	—
Bandwidth	400 Hz/Px	601 Hz/Px	579 Hz/Px	510 Hz/Px	199 Hz/Px	303 Hz/Px	540 Hz/Px	400 Hz/Px	540 Hz/Px	540 Hz/Px	350 Hz/Px	1358 Hz/Px
Fat-Water Contrast	Standard	Standard	Standard	Dixon	Fat Saturation	SPAIR	Fast Fat Saturation	Standard	Fast Fat Saturation	Fast Fat Saturation	Fast Fat Saturation	SPAIR
Fat Saturation	—	—	—	—	Strong	Strong	—	—	—	—	—	Strong
Saturation Mode	Standard	—	—	—	—	—	—	—	—	—	—	—
Gradient Mode	Normal	Fast	Fast	Bipolar	Fast	Fast	Fast	—	Fast	Fast	Fast	Fast
RF Pulse Type	Normal	Fast	Fast	Fast	Normal	Normal	Fast	Low SAR	Fast	Fast	Fast	Normal
Asymmetric Echo	Allowed	—	—	Strong	—	—	Off	Allowed	Off	Off	Off	—

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MR Gadopiclenol (VUEWAY®) Protocol for Siemens MRI Scanners
Body MR Imaging

IMAGING FORUMS, INC.

ACQUISITION PARAMETERS

Scan Description	LOCALIZER	CORONAL T2 HASTE	AXIAL T2 HASTE	AXIAL 3D IN OUT CAIPI	CORONAL Thick Slab RADIAL	MRCP PACE HASTE	AXIAL T1 VIBE Pre CAIPI	Care Bolus	AXIAL T1 VIBE Post CAIPI Double Arterial	AXIAL T1 VIBE Post CAIPI 60 sec 180 sec	CORONAL T1 VIBE Post Fat Sat 180 sec	AXIAL DWI Bipolar
Base Resolution	256	320	320	288	448	384	256	192	256	256	320	160
Phase Resolution	60%	90%	90%	80%	60%	98%	70%	74%	70%	70%	75%	100%
Slice Resolution	—	—	—	60%	—	82%	50%	—	50%	50%	50%	—
Averages	1	1	1	1	1	1	1	1	1	1	1	1, 3
Concatenations	27	2	2	1	5	1	1	—	1	1	1	1
b-value	—	—	—	—	—	—	—	—	—	—	—	0 s/mm2 50 s/mm2 800 s/mm2
FoV Read	430 mm	380 mm	380 mm	380 mm	300 mm	380 mm	380 mm	350 mm	380 mm	380 mm	380 mm	380 mm
FoV Phase	100%	100%	81%	83%	100%	100%	91%	100%	91%	91%	81%	80%
Phase Encoding Dir.	A >> P	R >> L	A >> P	A >> P	R >> L	R >> L	A >> P	A >> P	A >> P	A >> P	R >> L	A >> P
Phase Oversampling	25%	50%	0%	25%	60%	31%	20%	0%	20%	20%	50%	0%
Slice Oversampling	—	—	—	33%	—	10%	33%	—	33%	33%	57%	—
Phase Partial Fourier	6/8	5/8	6/8	6/8	6/8	Allowed	Off	7/8	Off	Off	Off	6/8
Slice Partial Fourier	—	—	—	6/8	—	7/8	6/8	—	6/8	6/8	6/8	—
Flow Compensation	None	Read	None	Fast	None	None	—	Fast	—	—	—	—

SCANNING RANGE

Scan Description	LOCALIZER	CORONAL T2 HASTE	AXIAL T2 HASTE	AXIAL 3D IN OUT CAIPI	CORONAL Thick Slab RADIAL	MRCP PACE HASTE	AXIAL T1 VIBE Pre CAIPI	Care Bolus	AXIAL T1 VIBE Post CAIPI Double Arterial	AXIAL T1 VIBE Post CAIPI 60 sec 180 sec	CORONAL T1 VIBE Post Fat Sat 180 sec	AXIAL DWI Bipolar
Elliptical Filter	On	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Normalize	Prescan	Prescan	Prescan	Prescan	Prescan	Off	Prescan	Off	Prescan	Prescan	Prescan	Off
Raw Filter	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Distortion Correction	2D	2D	2D	2D	2D	2D	2D	2D	2D	2D	2D	2D
Slice Thickness	7.0 mm	6.0 mm	6.0 mm	3.0 mm	40.0 mm	2.0 mm	3.0 mm	20.0 mm	3.0 mm	3.0 mm	3.0 mm	7.0 mm
Distance Factor	150%	20%	20%	20%	50%	50%	20%	20%	20%	20%	20%	20%
Slices	Slices 10	Slices 35	Slices 32	Slices per Slab 72	Slices 1	Slices per Slab 40	Slices per Slab 72	Slices 1	Slices per Slab 72	Slices per Slab 72	Slices per Slab 56	Slices 32
Time of Acquisition	18 sec	49 sec	43 sec	16 sec	23 sec	5:25 min	11 sec	1:01 min	20 sec	11 sec	17 sec	1:42 min

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