NW
IMAGING FORUMS, INC.

MR ANGIOGRAPHY ABDOMEN PELVIS 1.5T

INSTRUCTIONS AND PATIENT PREPARATION

Instructions	• Establish clear communication with the patient prior to the procedure regarding breath hold instructions • Position arms close by the side to minimize the required field of view in the right-left direction
Common Indications	Abdominal aortic aneurysm, artery stenosis or occlusion, dissection or vasculitis if contraindications for contrast
Position	Supine, head first
Coil	Body Array Coil (two in tandem if available)
Landmark	Mid-abdomen

CONTRAST AGENT PARAMETERS

Contrast Agents	Dose	Injection Rate	Dose Timing Method and Scan Delay
Gadopiclenol (VUEWAY)	0.05 mmol/kg	1.5 mL/sec	Fluoro triggered to abdominal aorta opacification
Saline Flush	20 mL	1.5 mL/sec	Immediately following gadolinium
Comments	• Report agent administered and dose • Use minimal dose for patients with a GFR <30 mL/sec		

IMAGING PARAMETERS

Scan Description	CORONAL HASTE	AXIAL HASTE	AXIAL IN/OUT	Pre CORONAL VIBE	Pre AXIAL VIBE	Pre CORONAL Angio	Dynamic CARE BOLUS CORONAL	Post CORONAL Angio	Post AXIAL VIBE 30 sec	Post AXIAL VIBE 180 sec	Post CORONAL VIBE 180 sec
Sequence Name	h	h	fl	fl	fl	fl	fl	fl	fl	fl	fl
Dimension	2D	2D	2D	3D	3D	3D	2D	3D	3D	3D	3D
Acceleration mode	GRAPPA	GRAPPA	GRAPPA	CAIPIRINHA	CAIPIRINHA	GRAPPA	None	GRAPPA	CAIPIRINHA	CAIPIRINHA	CAIPIRINHA
CAIPIRINHA Mode	—	—	—	Body Cor	Body Tra	—	—	—	Body Tra	Body Tra	Body Cor
Total Factor	—	—	—	4	4	—	—	—	4	4	4
Acceleration Factor PE	2	2	2	2	2	3	—	3	2	2	2
Acceleration Factor 3D	—	—	—	2	2	1	—	1	2	2	2

SCAN PARAMETERS

Scan Description	CORONAL HASTE	AXIAL HASTE	AXIAL IN/OUT	Pre CORONAL VIBE	Pre AXIAL VIBE	Pre CORONAL Angio	Dynamic CARE BOLUS CORONAL	Post CORONAL Angio	Post AXIAL VIBE 30 sec	Post AXIAL VIBE 180 sec	Post CORONAL VIBE 180 sec
TR	1300.0 ms	1200.0 ms	228.0 ms	4.6 ms	4.2 ms	2.89 ms	37.87 ms	2.89 ms	4.2 ms	4.2 ms	4.6 ms
TE	91.00 ms	228.00 ms	TE 1: 1.23 ms TE 2: 2.46 ms	2.20 ms	2.01 ms	0.99 ms	1.30 ms	0.99 ms	2.01 ms	2.01 ms	2.20 ms
Flip Angle	164 deg	159 deg	44 deg	10 deg	9 deg	24 deg	30 deg	24 deg	9 deg	9 deg	10 deg
Turbo Factor	256	198	—	—	—	—	—	—	—	—	—
Bandwidth	698 Hz/Px	698 Hz/Px	1: 1060 Hz/Px 2: 1060 Hz/Px	350 Hz/Px	400 Hz/Px	570 Hz/Px	400 Hz/Px	570 Hz/Px	400 Hz/Px	400 Hz/Px	350 Hz/Px
Fat-Water Contrast	Standard	Standard	Standard	Fast Fat Saturation	Fast Fat Saturation	Standard	Standard	Standard	Fast Fat Saturation	Fast Fat Saturation	Fast Fat Saturation
Gradient Mode	Fast	Fast	Fast	Fast	Fast	Fast	Fast	Fast	Fast	Fast	Fast
RF Pulse Type	Normal	Fast	Optimized	Fast	Fast	Normal	Normal	Normal	Fast	Fast	Fast
Asymmetric Echo	—	—	Allowed	Off	Off	Allowed	Allowed	Allowed	Off	Off	Off

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Supported by an educational grant from Bracco Diagnostics Inc.

MR Gadopiclenol (VUEWAY®) Protocol for Siemens MRI Scanners
MR Angiography

IMAGING FORUMS, INC.

ACQUISITION PARAMETERS

Scan Description	CORONAL HASTE	AXIAL HASTE	AXIAL IN/OUT	Pre CORONAL VIBE	Pre AXIAL VIBE	Pre CORONAL Angio	Dynamic CARE BOLUS CORONAL	Post CORONAL Angio	Post AXIAL VIBE 30 sec	Post AXIAL VIBE 180 sec	Post CORONAL VIBE 180 sec
Base Resolution	256	256	224	320	320	384	256	384	320	320	320
Phase Resolution	100%	95%	90%	75%	75%	70%	88%	70%	75%	75%	75%
Slice Resolution	—	—	—	50%	50%	63%	—	63%	50%	50%	50%
Averages	1	1	1	1	1	1	1	1	1	1	1
Concatenations	2	3	1	1	1	—	—	—	1	1	1
FoV Read	370 mm	380 mm	380 mm	400 mm	380 mm	500 mm	475 mm	500 mm	380 mm	380 mm	400 mm
FoV Phase	100%	81%	80%	81%	81%	81%	81%	81%	81%	81%	81%
Phase Encoding Dir.	R >> L	A >> P	A >> P	R >> L	A >> P	R >> L	A >> P	R >> L	A >> P	A >> P	R >> L
Phase Oversampling	50%	0%	20%	50%	30%	30%	0%	30%	30%	30%	50%
Slice Oversampling	—	—	—	33%	33%	13%	—	13%	33%	33%	33%
Phase Partial Fourier	5/8	Off	7/8	Off	Off	6/8	Off	6/8	Off	Off	Off
Slice Partial Fourier	—	—	—	6/8	7/8	6/8	—	6/8	7/8	7/8	6/8
Flow Compensation	None	None	None	—	—	—	—	—	—	—	—

SCANNING RANGE

Scan Description	CORONAL HASTE	AXIAL HASTE	AXIAL IN/OUT	Pre CORONAL VIBE	Pre AXIAL VIBE	Pre CORONAL Angio	Dynamic CARE BOLUS CORONAL	Post CORONAL Angio	Post AXIAL VIBE 30 sec	Post AXIAL VIBE 180 sec	Post CORONAL VIBE 180 sec
Raw Filter	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Elliptical Filter	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Distortion Correction	2D	2D	2D	2D	2D	2D	2D	2D	2D	2D	2D
Normalize	Prescan	Prescan	Prescan	Prescan	Prescan	Prescan	Prescan	Prescan	Prescan	Prescan	Prescan
Image Filter	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Distance Factor	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
Slice Thickness	6.0 mm	6.0 mm	6.0 mm	3.0 mm	3.0 mm	1.2 mm	21.0 mm	1.2 mm	3.0 mm	3.0 mm	3.0 mm
Slices	30 Slices	35 Slices	45 Slices	72 Slices per Slab	72 Slices per Slab	128 Slices per Slab	1 Slice	128 Slices per Slab	72 Slices per Slab	72 Slices per Slab	72 Slices per Slab
Time of Acquisition	49 sec	1:04 min	22 sec	17 sec	15 sec	20 sec	1:01 min	20 sec	15 sec	15 sec	17 sec

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