PITUITARY WITH/WITHOUT IV CONTRAST 1.5T R5.6

INSTRUCTIONS AND PATIENT PREPARATION

Instructions	• Change patient into hospital issued gown and pants • 20- to 22-gauge IV access preferred • Power injector preferred
Position	Supine, head first
Coil	15 channel head coil
Landmark	Glabella

CONTRAST AGENT PARAMETERS

Contrast Agent	Dose	Injection Rate
Gadopiclenol (VUEWAY)	0.05 mmol/kg	Hand injection or slow power injection (1-2 mL/sec is adequate)
Saline Flush	20 mL	Hand injection or slow power injection (1-2 mL/sec is adequate)
Comments	Coronal dynamic contrast-enhanced sequence is included as some small microadenomas may be better visualized on an early arterial phase; perform first phase of dynamic, pause built in, then restart scanner and start power injector at same time	

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MR Gadopiclenol (VUEWAY®) Protocol for Philips Healthcare Systems
Central Nervous System

IMAGING FORUMS, INC.

INFO PAGE

Scan Description	SURVEY Sella	AXIAL T2	SAGITTAL T1	CORONAL T1	CORONAL T2	CORONAL Dynamic	SAGITTAL T1 +C	CORONAL T1 +C
Total scan duration	00:31.4	01:20.7	03:08.4	02:05.7	02:55.6	02:27.2	03:08.4	02:05.7
Rel. SNR	1	1	1	1	1	1	1	1
Act. TR (ms)	—	5042	466	408	3377	400	466	408
Act. TR/TE (ms)	15 / 5.2	—	—	—	—	—	—	—
Act. TE (ms)	—	100	11	11	120	10	11	11
Dyn. scan time	—	—	—	—	—	00:12.0	—	—
ACQ matrix M x P	256 x 126	368 x 251	300 x 298	300 x 300	360 x 347	208 x 180	300 x 298	300 x 300
ACQ voxel MPS (mm)	0.98 / 1.98 / 10.0	0.60 / 0.73 / 5.00	0.60 / 0.60 / 3.00	0.60 / 0.60 / 3.00	0.50 / 0.52 / 3.00	0.87 / 1.00 / 3.00	0.60 / 0.60 / 3.00	0.60 / 0.60 / 3.00
REC voxel MPS (mm)	0.98 / 0.98 / 10.0	0.43 / 0.43 / 5.00	0.42 / 0.42 / 3.00	0.32 / 0.32 / 3.00	0.34 / 0.34 / 3.00	0.70 / 0.70 / 3.00	0.34 / 0.34 / 3.00	0.34 / 0.34 / 3.00
Scan percentage (%)	49	81	99	100	96	87	99	100
Packages	—	1	2	2	1	1	2	2
Min. slice gap (mm)	—	0	3	3	0	0	3	3
Act. slice gap (mm)	—	—	—	—	—	0.3	—	—
Max. slices	—	—	16	—	—	—	16	—
WFS (pix) / BW (Hz)	—	1.410 / 154.0	0.980 / 221.6	0.975 / 222.8	1.454 / 149.3	0.679 / 319.7	0.980 / 221.6	0.975 / 222.8
Full flow comp.	—	yes	—	—	—	—	—	—
TSE es / shot (ms)	—	13.3 / 187	8.0 / 40	8.0 / 40	13.3 / 227	9.0 / 45	8.0 / 40	8.0 / 40
TEeff / TEequiv (ms)	—	100 / 89	—	—	120 / 106	—	—	—
Min. TR (ms)	—	5042	466	408	3377	200	466	408
TFE shots	3	—	—	—	—	—	—	—
TFE dur. shot / acq (ms)	698.5 / 630.0	—	—	—	—	—	—	—
TFE shot interval (ms)	698.5	—	—	—	—	—	—	—
Min. TI delay	373.6	—	—	—	—	—	—	—
Act. WFS (pix) / BW (Hz)	1.161 / 187.1	—	—	—	—	—	—	—
Min. WFS (pix) / Max. BW (Hz)	0.525 / 413.8	—	—	—	—	—	—	—
Min. TR/TE (ms)	10 / 5.2	—	—	—	—	—	—	—
Local torso SAR	< 6 %	< 51 %	< 75 %	< 75 %	< 46 %	< 39 %	< 75 %	< 75 %
Whole body SAR / level	< 0.2 W/kg / normal	< 1.3 W/kg / normal	< 1.9 W/kg / normal	< 1.9 W/kg / normal	< 1.2 W/kg / normal	< 1.0 W/kg / normal	< 1.9 W/kg / normal	< 1.9 W/kg / normal
SED	0.0 kJ/kg	< 0.1 kJ/kg	< 0.4 kJ/kg	< 0.2 kJ/kg	< 0.2 kJ/kg	< 0.1 kJ/kg	< 0.4 kJ/kg	< 0.2 kJ/kg
Max B1+rms	1.05 uT	2.99 uT	3.63 uT	3.63 uT	2.83 uT	2.63 uT	3.63 uT	3.63 uT
PNS / level	17 % / normal	56 % / normal	53 % / normal	46 % / normal	44 % / normal	47 % / normal	53 % / normal	46 % / normal
dB/dt	12.8 T/s	53.6 T/s	73.5 T/s	73.8 T/s	63.3 T/s	41.0 T/s	73.5 T/s	73.8 T/s
Sound Pressure Level (dB)	-3.8	15.6	12.5	10.3	7.5	8.8	12.5	10.3

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MR Gadopiclenol (VUEWAY®) Protocol for Philips Healthcare Systems
Central Nervous System

IMAGING FORUMS, INC.

GEOMETRY

Scan Description	SURVEY Sella	AXIAL T2	SAGITTAL T1	CORONAL T1	CORONAL T2	CORONAL Dynamic	SAGITTAL T1 +C	CORONAL T1 +C
SmartSelect	yes	yes	yes	yes	yes	yes	yes	yes
Uniformity	—	CLEAR	CLEAR	CLEAR	CLEAR	CLEAR	CLEAR	CLEAR
FOV AP (mm)	250	220	180	42	42	10	180	42
FOV (mm)	(3) 50, (17) 10	—	—	—	—	—	—	—
FOV FH (mm)	250	149	180	180	180	180	180	180
FOV RL (mm)	—	184	45	180	180	180	45	180
ACQ voxel size AP (mm)	2	0.6	0.6	—	—	—	0.6	—
ACQ voxel size FH (mm)	1	—	0.6	0.6	0.5	0.9	0.6	0.6
ACQ voxel size RL (mm)	—	0.7	—	0.6	0.5	1	—	0.6
Slice thickness (mm)	10	5	3	3	3	3	3	3
Bar orientation	RL	—	—	—	—	—	—	—
VOI orientation	transverse	—	—	—	—	—	—	—
VOI size AP (mm)	30	—	—	—	—	—	—	—
VOI size FH (mm)	30	—	—	—	—	—	—	—
VOI size RL (mm)	30	—	—	—	—	—	—	—
Recon voxel size AP (mm)	1	0.4	0.4	—	—	—	0.3	—
Recon voxel size FH (mm)	1	—	0.4	0.3	0.3	0.7	0.3	0.3
Recon voxel size RL (mm)	—	0.4	—	0.3	0.3	0.7	—	0.3
Fold-over suppression	no	no	oversampling	no	no	no	oversampling	no
A (mm)	50	—	30	—	—	—	30	—
P (mm)	50	—	30	—	—	—	30	—
Reconstruction matrix	256	512	432	560	528	256	528	528
SENSE	no	no	no	no	no	no	no	no
CS-SENSE	no	yes	yes	yes	yes	yes	yes	yes
reduction	—	1.2	1.2	1.2	1.2	1.2	1.2	1.2
denoising	—	system default	system default	system default	system default	system default	system default	system default
k-t Acceleration	no	no	no	no	no	no	no	no
Stacks	3	1	1	1	1	1	1	1
type	(20) parallel	parallel	parallel	parallel	parallel	parallel	parallel	parallel
Slices	(3) 3, (17) 1	25	15	14	14	3	15	14
slice gap	user defined	user defined	user defined	user defined	user defined	default	user defined	user defined
gap (mm)	(20) 10	1	0	0	0	—	0	0
Slice orientation	sagittal, coronal, (18) transverse	transverse	sagittal	coronal	coronal	coronal	sagittal	coronal
Fold-over direction	AP, (19) RL	RL	AP	RL	RL	RL	AP	RL
Fat shift direction	(2) F, (18) P	P	F	F	F	F	F	F
radial axis	AP, RL, AP, (17) RL	—	—	—	—	—	—	—
radial angle (deg)	(20) 0	—	—	—	—	—	—	—
Minimum number of Packages	—	1	1	1	1	1	1	1
Slice scan order	default	default	default	default	default	default	default	default
Stack scan order	ascend	—	—	—	—	—	—	—
O-MAR	—	no	no	no	no	no	no	no

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Move table per stack	no	—	—	—	—	—	—	—
Large table movement	no	no	no	no	no	no	no	no
Stack alignment	no	—	—	—	—	—	—	—
Stack sort order	no	—	—	—	—	—	—	—
PlanAlign	no	no	no	no	no	no	no	no
REST slabs	0	1	0	0	0	0	0	0
type	—	parallel	—	—	—	—	—	—
thickness (mm)	—	60	—	—	—	—	—	—
position	—	feet	—	—	—	—	—	—
gap	—	default	—	—	—	—	—	—
Interactive positioning	no	no	no	no	no	no	no	no
Patient position	head first	head first	head first	head first	head first	head first	head first	head first
Patient body position	head first	head first	head first	head first	head first	head first	head first	head first
Patient orientation	supine	supine	supine	supine	supine	supine	supine	supine
Patient body orientation	supine	supine	supine	supine	supine	supine	supine	supine

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IMAGING FORUMS, INC.

CONTRAST

Scan Description	SURVEYSella	AXIALT2	SAGITTALT1	CORONALT1	CORONALT2	CORONALDynamic	SAGITTALT1 +C	CORONALT1 +C		
Scan type	Imaging	Imaging	Imaging	Imaging	Imaging	Imaging	Imaging	Imaging	Scan type	—
Scan mode	M2D	MS	MS	MS	MS	MS	MS	MS	Scan mode	—
Contrast enhancement	T1	—	—	—	—	—	—	—	Contrast enhancement	—
Modified SE	—	no	no	no	no	no	no	no	Modified SE	—
Acquisition mode	cartesian	cartesian	cartesian	cartesian	cartesian	cartesian	cartesian	cartesian	Acquisition mode	—
Fast Imaging mode	TFE	TSE	TSE	TSE	TSE	TSE	TSE	TSE	Fast Imaging mode	—
TSE factor	—	14	5	5	17	5	5	5	TSE factor	—
TE spacing	42	—	user defined	user defined	—	user defined	user defined	user defined	TE spacing	—
Echoes	1	1	1	1	1	1	1	1	Echoes	—
Flip angle (deg)	20	90	69	69	90	90	69	69	Flip angle (deg)	—
Refocusing control	—	constant	no	no	constant	no	no	no	Refocusing control	—
angle (deg)	—	120	—	—	120	—	—	—	angle (deg)	—
TR	user defined	range	range	range	range	range	range	range	TR	—
Halfscan	no	no	no	no	no	no	no	no	Halfscan	—
Water-fat shift	maximum	maximum	maximum	maximum	maximum	maximum	maximum	maximum	Water-fat shift	—
Shim	—	default	default	default	default	default	default	default	Shim	—
mDIXON	no	no	no	no	no	no	no	no	mDIXON	—
Fat suppression	no	no	no	no	no	no	no	no	Fat suppression	—
Water suppression	no	no	no	no	no	no	no	no	Water suppression	—
TFE prepulse	invert	—	—	—	—	—	—	—	TFE prepulse	—
PSIR	no	—	—	—	—	—	—	—	PSIR	—
MTC	no	no	no	no	no	no	no	no	MTC	—
T2prep	no	—	—	—	—	—	—	—	T2prep	—
Diffusion mode	no	no	no	no	no	no	no	no	Diffusion mode	—
T1 mapping	no	no	no	no	no	no	no	no	T1 mapping	—
SAR mode	high	high	moderate	moderate	high	high	moderate	moderate	SAR mode	—
B1 mode	default	default	default	default	default	default	default	default	B1 mode	—
SAR allow first level	no	no	no	no	no	no	no	no	SAR allow first level	—
Patient pregnancy	no	no	no	no	no	no	no	no	Patient pregnancy	—
Patient WB SAR [W/kg]	—	—	—	—	—	—	—	—	Patient WB SAR [W/kg]	—
Patient Head SAR [W/kg]	—	—	—	—	—	—	—	—	Patient Head SAR [W/kg]	—
Patient max. dB/dt [T/s]	—	—	—	—	—	—	—	—	Patient max. dB/dt [T/s]	—
Max slewrate [T/m/s]	—	—	—	—	—	—	—	—	Max slewrate [T/m/s]	—
Max. B1+rms [uT]	—	—	—	—	—	—	—	—	Max. B1+rms [uT]	—
PNS mode	low	low	low	low	low	low	low	low	PNS mode	—
Gradient mode	regular	default	maximum	maximum	maximum	default	maximum	maximum	Gradient mode	—
SofTone mode	no	no	no	no	no	no	no	no	SofTone mode	—

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NW
IMAGING FORUMS, INC.

MOTION

Scan Description	SURVEY Sella	AXIAL T2	SAGITTAL T1	CORONAL T1	CORONAL T2	CORONAL Dynamic	SAGITTAL T1 +C	CORONAL T1 +C
Cardiac synchronization	no	no	no	no	no	no	no	no
Respiratory compensation	no	no	no	no	no	no	no	no
Navigator respiratory comp	no	no	no	no	no	no	no	no
Flow compensation	no	yes	no	no	no	no	no	no
direction	—	in-plane	—	—	—	—	—	—
fMRI echo stabilisation	no	—	—	—	—	—	—	—
Temporal slice spacing	—	default	default	default	default	default	default	default
Motion smoothing	—	no	no	no	no	no	no	no
NSA	1	1	3	3	3	1	3	3
SMART	—	—	no	no	no	—	no	no
MRE enable	no	no	no	no	no	no	no	no

DYNAMIC ANGIO

Scan Description	SURVEY Sella	AXIAL T2	SAGITTAL T1	CORONAL T1	CORONAL T2	CORONAL Dynamic	SAGITTAL T1 +C	CORONAL T1 +C
Angio / Contrast enh.	no	—	—	—	—	—	—	—
Quantitative flow	no	—	—	—	—	—	—	—
Manual start	no	no	no	no	no	yes	no	no
Dynamic study	no	no	no	no	no	individual	no	no
dyn scans	—	—	—	—	—	12	—	—
dyn scan times	—	—	—	—	—	user defined	—	—
(mm:ss)	—	—	—	—	—	manual (00:00.0), manual (00:13.6), shortest (00:27.2), shortest (00:39.2), shortest (00:51.2), shortest (01:03.2), shortest (01:15.2), shortest (01:27.2), shortest (01:39.2), shortest (01:51.2), shortest (02:03.2), shortest (02:15.2)	—	—
fov time mode	—	—	—	—	—	default	—	—
dummy scans	—	—	—	—	—	0	—	—
immediate subtraction	—	—	—	—	—	no	—	—
fast next scan	—	—	—	—	—	no	—	—
synch. ext. device	—	—	—	—	—	no	—	—
prospect. motion corr.	—	—	—	—	—	no	—	—
Keyhole	—	—	—	—	—	no	—	—
Arterial Spin labeling	no	no	no	no	no	no	no	no

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POST PROCESSING

Scan Description	SURVEY Sella	AXIAL T2	SAGITTAL T1	CORONAL T1	CORONAL T2	CORONAL Dynamic	SAGITTAL T1 +C	CORONAL T1 +C
Preparation phases	—	auto	auto	auto	auto	auto	auto	auto
Interactive F0	no	no	no	no	no	no	no	no
Quick Survey	default	default	default	default	default	default	default	default
MIP/MPR	no	no	no	no	no	no	no	no
SWIp	no	—	—	—	—	—	—	—
Images	M, (3) no	M, (3) no	M, (3) no	M, (3) no	M, (3) no	M, (3) no	M, (3) no	M, (3) no
Autoview image	M	M	M	M	M	M	M	M
Calculated images	(4) no	(4) no	(4) no	(4) no	(4) no	(4) no	(4) no	(4) no
Reference tissue	White matter	White matter	White matter	White matter	White matter	White matter	White matter	White matter
Recon compression	No	No	No	No	No	No	No	No
Preset window contrast	soft	soft	soft	soft	soft	soft	soft	soft
Reconstruction mode	immediate	immediate	real time	real time	real time	real time	real time	real time
Save raw data	no	no	no	no	no	no	no	no
Hardcopy protocol	no	no	no	no	no	no	no	no
Image filter	system default	system default	system default	system default	system default	system default	system default	system default
Uniformity correction	no	no	no	no	no	no	no	no
Geometry correction	default	default	default	default	default	default	default	default
Free rotatable	no	no	no	no	no	no	no	no
IF_info_seperator	0	1634755923	0	0	1634755923	0	0	0

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