

Protocol: adult\_pelvis\_BONY PELVIS

PATIENT POSITION		IMAGING PARAMETERS	
Patient Entry	Feet First	Imaging Mode	2D
Patient Position	Supine	Pulse Sequence	Spin Echo
Coil Configuration	HD 8Ch Body Array by GE	Imaging Options	Seq, EDR, Fast, SS, ARC
Plane	3-PLANE	<b>SCAN RANGE</b>	
Series Description	3-Plane Localizer	FOV	48.0
<b>SCAN TIMING</b>		Slice Thickness	8.0
TE	80.0	Slice Spacing	0.0
Number of Echoes	1	<b>ACQ TIMING</b>	
TR	Minimum	Freq	352
Receiver Bandwidth	83.33	Phase	160
<b>IMAGE ENHANCE</b>		Freq DIR	Unswap
Filter Choice	None	# of Acq. Before Pause	0
<b>GATING/TRIGGER</b>		Phase FOV	1.00
Auto Trigger Type	Off	Auto Shim	Auto
<b>FMRI</b>		Phase Correction	No
PSD Trigger	Internal	<b>USER CVS</b>	
Slice Order	Interleaved	User CV2	240.00
View Order	Bottom/Up	<b>MULTI-PHASE</b>	
# of Repetitions REST	0	Seperate Series	0
# of Repetitions ACTIVE	0	Mask Phase	0
<b>SAT</b>		Mask Pause	0
Tag Type	None	<b>DIFFUSION</b>	
<b>TRICKS</b>		Recon All Images	On
Pause On/Off	On	<b>CONTRAST</b>	
Auto Subtract	0	Contrast Yes/No	No
Auto SCIC	Off		
<b>OTHERS</b>			
Protocol Notes	<p><i>This protocol is built based on Express coil suite. Please select the appropriate coil which is available in your site and optimizing the parameters accordingly.</i></p>		

Protocol: adult\_pelvis\_BONY PELVIS

Ax T1 FSE	<b>PATIENT POSITION</b>		<b>IMAGING PARAMETERS</b>	
	Patient Entry	<i>Feet First</i>	Imaging Mode	<i>2D</i>
	Patient Position	<i>Supine</i>	Pulse Sequence	<i>FSE-XL</i>
	Coil Configuration	<i>HD 8Ch Body Array by GE</i>	Imaging Options	<i>NPW, EDR, TRF, Fast, ARC, MRF</i>
	Plane	<i>AXIAL</i>	<b>SCAN RANGE</b>	
	Series Description	<i>Ax T1 FSE</i>	FOV	<i>36.0</i>
	<b>SCAN TIMING</b>		Slice Thickness	<i>4.0</i>
	Flip Angle	<i>160</i>	Slice Spacing	<i>1.0</i>
	TE	<i>Min Full</i>	<b>ACQ TIMING</b>	
	Number of Echoes	<i>1</i>	Freq	<i>256</i>
	TR	<i>450.0</i>	Phase	<i>192</i>
	Echo Train Length	<i>3</i>	Freq DIR	<i>R/L</i>
	Receiver Bandwidth	<i>25.00</i>	Fat Shift DIR	<i>Normal (L)</i>
	<b>IMAGE ENHANCE</b>		NEX	<i>4.00</i>
	Filter Choice	<i>None</i>	Phase FOV	<i>1.00</i>
	<b>GATING/TRIGGER</b>		Auto Shim	<i>Auto</i>
	Auto Trigger Type	<i>Off</i>	Phase Correction	<i>No</i>
	<b>FMRI</b>		<b>USER CVS</b>	
	PSD Trigger	<i>Internal</i>	User CV7	<i>1.00</i>
	Slice Order	<i>Interleaved</i>	User CV22	<i>1.00</i>
View Order	<i>Bottom/Up</i>	TR Min	<i>450.0</i>	
# of Repetitions REST	<i>0</i>	TR Max	<i>700.0</i>	
# of Repetitions ACTIVE	<i>0</i>	<b>MULTI-PHASE</b>		
<b>SAT</b>		Seperate Series	<i>0</i>	
Tag Type	<i>None</i>	Mask Phase	<i>0</i>	
<b>TRICKS</b>		Mask Pause	<i>0</i>	
Pause On/Off	<i>On</i>	<b>DIFFUSION</b>		
Auto Subtract	<i>0</i>	Recon All Images	<i>On</i>	
Auto SCIC	<i>Off</i>	<b>CONTRAST</b>		
		Contrast Yes/No	<i>No</i>	

Ax T1 FSE

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AX STIR	<b>PATIENT POSITION</b>		<b>IMAGING PARAMETERS</b>	
	Patient Entry	<i>Feet First</i>	Imaging Mode	<i>2D</i>
	Patient Position	<i>Supine</i>	Pulse Sequence	<i>FSE-XL</i>
	Coil Configuration	<i>HD 8Ch Body Array by GE</i>	Imaging Options	<i>NPW, Seq, EDR, TRF, Fast, ZIP512, ARC, MRF, IrP</i>
	Plane	<i>OBLIQUE</i>	<b>SCAN RANGE</b>	
	Series Description	<i>AX STIR</i>	FOV	<i>36.0</i>
	<b>SCAN TIMING</b>		Slice Thickness	<i>4.0</i>
	Flip Angle	<i>160</i>	Slice Spacing	<i>1.0</i>
	TE	<i>42.0</i>	<b>ACQ TIMING</b>	
	Number of Echoes	<i>1</i>	Freq	<i>288</i>
	TR	<i>2800.0</i>	Phase	<i>224</i>
	TI	<i>145</i>	Freq DIR	<i>Swap</i>
	Echo Train Length	<i>14</i>	Fat Shift DIR	<i>Normal</i>
	Receiver Bandwidth	<i>25.00</i>	NEX	<i>2.00</i>
	<b>IMAGE ENHANCE</b>		# of Acq. Before Pause	<i>0</i>
	Filter Choice	<i>None</i>	Phase FOV	<i>1.00</i>
	<b>GATING/TRIGGER</b>		Auto Shim	<i>Auto</i>
	Auto Trigger Type	<i>Off</i>	Phase Correction	<i>No</i>
	<b>FMRI</b>		<b>USER CVS</b>	
	PSD Trigger	<i>Internal</i>	User CV21	<i>1.00</i>
Slice Order	<i>Interleaved</i>	User CV22	<i>1.00</i>	
View Order	<i>Bottom/Up</i>	<b>MULTI-PHASE</b>		
# of Repetitions REST	<i>0</i>	Seperate Series	<i>0</i>	
# of Repetitions ACTIVE	<i>0</i>	Mask Phase	<i>0</i>	
<b>SAT</b>		Mask Pause	<i>0</i>	
Tag Type	<i>None</i>	<b>DIFFUSION</b>		
<b>TRICKS</b>		Recon All Images	<i>On</i>	
Pause On/Off	<i>On</i>	<b>CONTRAST</b>		
Auto Subtract	<i>0</i>	Contrast Yes/No	<i>No</i>	
Auto SCIC	<i>Off</i>			

AX STIR

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PATIENT POSITION		IMAGING PARAMETERS	
Patient Entry	Feet First	Imaging Mode	2D
Patient Position	Supine	Pulse Sequence	FSE-XL
Coil Configuration	HD 8Ch Body Array by GE	Imaging Options	NPW, EDR, TRF, Fast, ARC, MRF
Plane	OBLIQUE		
Series Description	Cor T1 FSE		
SCAN TIMING		SCAN RANGE	
Flip Angle	160	FOV	36.0
TE	Min Full	Slice Thickness	5.0
Number of Echoes	1	Slice Spacing	0.5
TR	492.0		
Echo Train Length	3	ACQ TIMING	
Receiver Bandwidth	41.67	Freq	320
		Phase	224
		Freq DIR	Unswap
		Fat Shift DIR	Normal
		NEX	2.00
		# of Acq. Before Pause	0
		Phase FOV	1.00
		Auto Shim	Auto
		Phase Correction	No
IMAGE ENHANCE		USER CVS	
Filter Choice	None	User CV7	1.00
		User CV15	2.00
		User CV17	1.00
		User CV22	1.00
		TR Min	450.0
		TR Max	650.0
GATING/TRIGGER		MULTI-PHASE	
Auto Trigger Type	Off	Seperate Series	0
		Mask Phase	0
		Mask Pause	0
FMRI		DIFFUSION	
PSD Trigger	Internal	Recon All Images	On
Slice Order	Interleaved		
View Order	Bottom/Up	CONTRAST	
# of Repetitions REST	0	Contrast Yes/No	No
# of Repetitions ACTIVE	0		
SAT			
SAT Location	P		
SAT Location	S		
Tag Type	None		
TRICKS			
Pause On/Off	On		
Auto Subtract	0		
Auto SCIC	2		

Cor T1 FSE

Cor T1 FSE

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PATIENT POSITION		IMAGING PARAMETERS	
Patient Entry	Feet First	Imaging Mode	2D
Patient Position	Supine	Pulse Sequence	FSE-XL
Coil Configuration	HD 8Ch Body Array by GE	Imaging Options	NPW, Seq, EDR, TRF, Fast, ZIP512, ARC, MRF, IrP
Plane	OBLIQUE	<b>SCAN RANGE</b>	
Series Description	COR STIR	FOV	36.0
<b>SCAN TIMING</b>		Slice Thickness	5.0
Flip Angle	160	Slice Spacing	0.5
TE	42.0	<b>ACQ TIMING</b>	
Number of Echoes	1	Freq	288
TR	2800.0	Phase	224
TI	145	Freq DIR	Swap
Echo Train Length	14	Fat Shift DIR	Normal
Receiver Bandwidth	25.00	NEX	3.00
<b>IMAGE ENHANCE</b>		# of Acq. Before Pause	0
Filter Choice	None	Phase FOV	1.00
<b>GATING/TRIGGER</b>		Auto Shim	Auto
Auto Trigger Type	Off	Phase Correction	No
<b>FMRI</b>		<b>USER CVS</b>	
PSD Trigger	Internal	User CV21	1.00
Slice Order	Interleaved	User CV22	1.00
View Order	Bottom/Up	<b>MULTI-PHASE</b>	
# of Repetitions REST	0	Seperate Series	0
# of Repetitions ACTIVE	0	Mask Phase	0
<b>SAT</b>		Mask Pause	0
Tag Type	None	<b>DIFFUSION</b>	
<b>TRICKS</b>		Recon All Images	On
Pause On/Off	On	<b>CONTRAST</b>	
Auto Subtract	0	Contrast Yes/No	No
Auto SCIC	Off		

COR STIR

COR STIR

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PATIENT POSITION		IMAGING PARAMETERS	
Patient Entry	Feet First	Imaging Mode	2D
Patient Position	Supine	Pulse Sequence	FSE-XL
Coil Configuration	HD 8Ch Body Array by GE	Imaging Options	FC, NPW, EDR, TRF, Fast, ARC, MRF
Plane	OBLIQUE		
Series Description	SAG PD FSE FS		
SCAN TIMING		SCAN RANGE	
Flip Angle	160	FOV	36.0
TE	30.0	Slice Thickness	5.0
Number of Echoes	1	Slice Spacing	1.0
TR	2000.0		
Echo Train Length	6	ACQ TIMING	
Receiver Bandwidth	27.78	Freq	288
		Phase	224
		Freq DIR	Unswap
		Fat Shift DIR	Normal
		NEX	2.00
		Phase FOV	1.00
		Auto Shim	Auto
		Phase Correction	Yes
		Flow Direction	Freq
		Compensation	
IMAGE ENHANCE		USER CVS	
Filter Choice	None	User CV8	1.00
		User CV19	0.90
		User CV22	1.00
		TR Min	2000.0
		TR Max	4000.0
GATING/TRIGGER		MULTI-PHASE	
Auto Trigger Type	Off	Seperate Series	0
		Mask Phase	0
		Mask Pause	0
FMRI		DIFFUSION	
PSD Trigger	Internal	Recon All Images	On
Slice Order	Interleaved		
View Order	Bottom/Up	CONTRAST	
# of Repetitions REST	0	Contrast Yes/No	No
# of Repetitions ACTIVE	0		
SAT			
SAT Location	S		
SAT Location	I		
Tag Type	None		
Fat/Water Saturation	Fat		
TRICKS			
Pause On/Off	On		
Auto Subtract	0		
Auto SCIC	2		

SAG PD FSE FS

SAG PD FSE FS

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PATIENT POSITION		IMAGING PARAMETERS	
Patient Entry	<i>Feet First</i>	Imaging Mode	<i>2D</i>
Patient Position	<i>Supine</i>	Pulse Sequence	<i>Spin Echo</i>
Coil Configuration	<i>HD 8Ch Body Array by GE</i>	Imaging Options	<i>Fast, SS</i>
Plane	<i>OBLIQUE</i>	<b>SCAN RANGE</b>	
Series Description	<i>---OPTION---</i>	FOV	<i>22.0</i>
<b>SCAN TIMING</b>		Slice Thickness	<i>5.0</i>
TE	<i>Minimum</i>	Slice Spacing	<i>1.0</i>
TR	<i>Minimum</i>	<b>ACQ TIMING</b>	
Receiver Bandwidth	<i>83.33</i>	Freq	<i>128</i>
<b>IMAGE ENHANCE</b>		Phase	<i>128</i>
Filter Choice	<i>None</i>	Freq DIR	<i>A/P</i>
<b>GATING/TRIGGER</b>		NEX	<i>1.0</i>
Auto Trigger Type	<i>Off</i>	# of Acq. Before Pause	<i>0</i>
<b>FMRI</b>		Phase FOV	<i>1.00</i>
PSD Trigger	<i>Internal</i>	Auto Shim	<i>Auto</i>
Slice Order	<i>Interleaved</i>	Phase Correction	<i>No</i>
View Order	<i>Bottom/Up</i>	<b>USER CVS</b>	
# of Repetitions REST	<i>0</i>	User CV2	<i>240.00</i>
# of Repetitions ACTIVE	<i>0</i>	User CV13	<i>1.00</i>
<b>SAT</b>		TR Min	<i>0.0</i>
Tag Type	<i>None</i>	TR Max	<i>0.0</i>
<b>TRICKS</b>		<b>MULTI-PHASE</b>	
Pause On/Off	<i>On</i>	Seperate Series	<i>0</i>
Auto Subtract	<i>0</i>	Mask Phase	<i>0</i>
Auto SCIC	<i>Off</i>	Mask Pause	<i>0</i>
		<b>DIFFUSION</b>	
		Recon All Images	<i>On</i>
		<b>CONTRAST</b>	
		Contrast Yes/No	<i>No</i>

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Ax T1 FSE FS PRE	<b>PATIENT POSITION</b>		<b>IMAGING PARAMETERS</b>	
	Patient Entry	<i>Feet First</i>	Imaging Mode	<i>2D</i>
	Patient Position	<i>Supine</i>	Pulse Sequence	<i>FSE-XL</i>
	Coil Configuration	<i>HD 8Ch Body Array by GE</i>	Imaging Options	<i>NPW, EDR, TRF, Fast, ARC, MRF</i>
	Plane	<i>AXIAL</i>	<b>SCAN RANGE</b>	
	Series Description	<i>Ax T1 FSE FS PRE</i>	FOV	<i>36.0</i>
	<b>SCAN TIMING</b>		Slice Thickness	<i>4.0</i>
	Flip Angle	<i>160</i>	Slice Spacing	<i>1.0</i>
	TE	<i>Min Full</i>	<b>ACQ TIMING</b>	
	Number of Echoes	<i>1</i>	Freq	<i>256</i>
	TR	<i>450.0</i>	Phase	<i>192</i>
	Echo Train Length	<i>3</i>	Freq DIR	<i>R/L</i>
	Receiver Bandwidth	<i>25.00</i>	Fat Shift DIR	<i>Normal (L)</i>
	<b>IMAGE ENHANCE</b>		NEX	<i>4.00</i>
	Filter Choice	<i>None</i>	# of Acq. Before Pause	<i>0</i>
	<b>GATING/TRIGGER</b>		Phase FOV	<i>1.00</i>
	Auto Trigger Type	<i>Off</i>	Auto Shim	<i>Auto</i>
	<b>FMRI</b>		Phase Correction	<i>No</i>
	PSD Trigger	<i>Internal</i>	<b>USER CVS</b>	
	Slice Order	<i>Interleaved</i>	User CV7	<i>1.00</i>
	View Order	<i>Bottom/Up</i>	User CV19	<i>1.00</i>
	# of Repetitions REST	<i>0</i>	User CV22	<i>1.00</i>
	# of Repetitions ACTIVE	<i>0</i>	TR Min	<i>450.0</i>
	<b>SAT</b>		TR Max	<i>700.0</i>
	Tag Type	<i>None</i>	<b>MULTI-PHASE</b>	
Fat/Water Saturation	<i>Fat</i>	Seperate Series	<i>0</i>	
<b>TRICKS</b>		Mask Phase	<i>0</i>	
Pause On/Off	<i>On</i>	Mask Pause	<i>0</i>	
Auto Subtract	<i>0</i>	<b>DIFFUSION</b>		
Auto SCIC	<i>Off</i>	Recon All Images	<i>On</i>	
		<b>CONTRAST</b>		
		Contrast Yes/No	<i>Yes</i>	

Ax T1 FSE FS PRE



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+C Ax T1 FSE FS	<b>PATIENT POSITION</b>		<b>IMAGING PARAMETERS</b>	
	Patient Entry	<i>Feet First</i>	Imaging Mode	<i>2D</i>
	Patient Position	<i>Supine</i>	Pulse Sequence	<i>FSE-XL</i>
	Coil Configuration	<i>HD 8Ch Body Array by GE</i>	Imaging Options	<i>NPW, EDR, TRF, Fast, ARC, MRF</i>
	Plane	<i>AXIAL</i>	<b>SCAN RANGE</b>	
	Series Description	<i>+C Ax T1 FSE FS</i>	FOV	<i>36.0</i>
	<b>SCAN TIMING</b>		Slice Thickness	<i>4.0</i>
	Flip Angle	<i>160</i>	Slice Spacing	<i>1.0</i>
	TE	<i>Min Full</i>	<b>ACQ TIMING</b>	
	Number of Echoes	<i>1</i>	Freq	<i>256</i>
	TR	<i>450.0</i>	Phase	<i>192</i>
	Echo Train Length	<i>3</i>	Freq DIR	<i>R/L</i>
	Receiver Bandwidth	<i>25.00</i>	Fat Shift DIR	<i>Normal (L)</i>
	<b>IMAGE ENHANCE</b>		NEX	<i>4.00</i>
	Filter Choice	<i>None</i>	# of Acq. Before Pause	<i>0</i>
	<b>GATING/TRIGGER</b>		Phase FOV	<i>1.00</i>
	Auto Trigger Type	<i>Off</i>	Auto Shim	<i>Auto</i>
	<b>FMRI</b>		Phase Correction	<i>No</i>
	PSD Trigger	<i>Internal</i>	<b>USER CVS</b>	
	Slice Order	<i>Interleaved</i>	User CV7	<i>1.00</i>
	View Order	<i>Bottom/Up</i>	User CV19	<i>1.00</i>
	# of Repetitions REST	<i>0</i>	User CV22	<i>1.00</i>
	# of Repetitions ACTIVE	<i>0</i>	TR Min	<i>450.0</i>
	<b>SAT</b>		TR Max	<i>700.0</i>
	Tag Type	<i>None</i>	<b>MULTI-PHASE</b>	
Fat/Water Saturation	<i>Fat</i>	Seperate Series	<i>0</i>	
<b>TRICKS</b>		Mask Phase	<i>0</i>	
Pause On/Off	<i>On</i>	Mask Pause	<i>0</i>	
Auto Subtract	<i>0</i>	<b>DIFFUSION</b>		
Auto SCIC	<i>Off</i>	Recon All Images	<i>On</i>	
		<b>CONTRAST</b>		
		Contrast Yes/No	<i>Yes</i>	

+C Ax T1 FSE FS

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PATIENT POSITION		IMAGING PARAMETERS	
Patient Entry	Feet First	Imaging Mode	2D
Patient Position	Supine	Pulse Sequence	FSE-XL
Coil Configuration	HD 8Ch Body Array by GE	Imaging Options	NPW, EDR, TRF, Fast, ARC, MRF
Plane	OBLIQUE		
Series Description	+C Cor T1 FSE FS		
SCAN TIMING		SCAN RANGE	
Flip Angle	160	FOV	36.0
TE	Min Full	Slice Thickness	5.0
Number of Echoes	1	Slice Spacing	0.5
TR	507.0		
Echo Train Length	3	ACQ TIMING	
Receiver Bandwidth	41.67	Freq	320
		Phase	224
		Freq DIR	Unswap
		Fat Shift DIR	Normal
		NEX	2.00
		# of Acq. Before Pause	0
		Phase FOV	1.00
		Auto Shim	Auto
		Phase Correction	No
IMAGE ENHANCE		USER CVS	
Filter Choice	None	User CV7	1.00
		User CV15	2.00
		User CV17	1.00
		User CV19	1.00
		User CV22	1.00
		TR Min	450.0
		TR Max	650.0
GATING/TRIGGER		MULTI-PHASE	
Auto Trigger Type	Off	Seperate Series	0
		Mask Phase	0
		Mask Pause	0
FMRI		DIFFUSION	
PSD Trigger	Internal	Recon All Images	On
Slice Order	Interleaved		
View Order	Bottom/Up		
# of Repetitions REST	0		
# of Repetitions ACTIVE	0		
SAT		CONTRAST	
SAT Location	P	Contrast Yes/No	Yes
SAT Location	S		
Tag Type	None		
Fat/Water Saturation	Fat		
TRICKS			
Pause On/Off	On		
Auto Subtract	0		
Auto SCIC	2		

+C Cor T1 FSE FS

+C Cor T1 FSE FS