

Protocol: adult\_head\_BRAIN SEIZURE W/WO 11-19-19

3-Plane Localizer	<b>PATIENT POSITION</b>		<b>IMAGING PARAMETERS</b>	
	Patient Entry	Head First	Imaging Mode	2D
	Patient Position	Supine	Pulse Sequence	Spin Echo
	Coil Configuration	GEM Head	Imaging Options	Seq, EDR, TRF, Fast, SS, FR, ARC
	Plane	3-PLANE	<b>SCAN RANGE</b>	
	Series Description	3-Plane Localizer	FOV	24.0
	<b>SCAN TIMING</b>		Slice Thickness	10.0
	TE	Minimum	Slice Spacing	5.0
	Number of Echoes	1	<b>ACQ TIMING</b>	
	TR	Minimum	Freq	288
	Receiver Bandwidth	83.33	Phase	128
	<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>	
	View Order	Bottom/Up	User CV1	1.00
	# of Repetitions REST	0	<b>MULTI-PHASE</b>	
	# of Repetitions ACTIVE	0	Seperate Series	0
	<b>SAT</b>		Mask Phase	0
	Tag Type	None	Mask Pause	0
	<b>TRICKS</b>		<b>DIFFUSION</b>	
	Pause On/Off	On	Recon All Images	On
Auto Subtract	0	<b>CONTRAST</b>		
Auto SCIC	Off	Contrast Yes/No	No	

3-Plane Localizer

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3D Sag T1 Cube pre	<b>PATIENT POSITION</b>		<b>IMAGING PARAMETERS</b>	
	Patient Entry	Head First	Imaging Mode	3D
	Patient Position	Supine	Pulse Sequence	Cube
	Coil Configuration	GEM Head	Imaging Options	EDR, Fast, ZIP512, ZIP2, FR, ARC
	Plane	OBLIQUE	<b>SCAN RANGE</b>	
	Series Description	3D Sag T1 Cube pre	FOV	24.0
	<b>SCAN TIMING</b>		Slice Thickness	1.4
	TE	10.0	Location per Slab	120
	Number of Echoes	1	Overlap Locations	0
	TR	550.0	<b>ACQ TIMING</b>	
	Echo Train Length	22	Freq	240
	Receiver Bandwidth	62.50	Phase	240
	<b>IMAGE ENHANCE</b>		Freq DIR	S/I
	Filter Choice	G	NEX	1.00
	<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>	
	View Order	Bottom/Up	User CV22	3.00
	# of Repetitions REST	0	<b>MULTI-PHASE</b>	
# of Repetitions ACTIVE	0	Seperate Series	0	
<b>SAT</b>		Mask Phase	0	
Tag Type	None	Mask Pause	0	
<b>TRICKS</b>		<b>DIFFUSION</b>		
Pause On/Off	On	Recon All Images	On	
Auto Subtract	0	<b>CONTRAST</b>		
Auto SCIC	2	Contrast Yes/No	No	
<b>OTHERS</b>				
Protocol Notes	Axial reformats 1mm x 1mm			

3D Sag T1 Cube pre

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PATIENT POSITION		IMAGING PARAMETERS	
Patient Entry	Head First	Imaging Mode	2D
Patient Position	Supine	Pulse Sequence	FSE-XL
Coil Configuration	GEM Head	Imaging Options	FC, EDR, TRF, Fast, ARC, T2flair
Plane	OBLIQUE		
Series Description	AXIAL T2W FLAIR		
SCAN TIMING		SCAN RANGE	
Flip Angle	160	FOV	22.0
TE	140.0	Slice Thickness	5.0
Number of Echoes	1	Slice Spacing	1.0
TR	8800.0		
TI	2546	ACQ TIMING	
Echo Train Length	20	Freq	320
Receiver Bandwidth	31.25	Phase	192
IMAGE ENHANCE		Freq DIR	A/P
Filter Choice	None	Fat Shift DIR	Normal (A)
GATING/TRIGGER		NEX	1.00
Auto Trigger Type	Off	Phase FOV	1.00
FMRI		Auto Shim	Auto
PSD Trigger	Internal	Phase Correction	No
View Order	Bottom/Up	Flow Direction	Slice
# of Repetitions REST	0	Compensation	
# of Repetitions ACTIVE	0	USER CVS	
SAT		User CV18	1.00
Tag Type	None	MULTI-PHASE	
TRICKS		Seperate Series	0
Pause On/Off	On	Mask Phase	0
Auto Subtract	0	Mask Pause	0
Auto SCIC	2	DIFFUSION	
		Recon All Images	On
		CONTRAST	
		Contrast Yes/No	No

AXIAL T2W FLAIR

AXIAL T2W FLAIR

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AXIAL T2W	<b>PATIENT POSITION</b>		<b>IMAGING PARAMETERS</b>	
	Patient Entry	Head First	Imaging Mode	2D
	Patient Position	Supine	Pulse Sequence	FSE-XL
	Coil Configuration	GEM Head	Imaging Options	FC, EDR, TRF, Fast, FR
	Plane	OBLIQUE	<b>SCAN RANGE</b>	
	Series Description	AXIAL T2W	FOV	22.0
	<b>SCAN TIMING</b>		Slice Thickness	5.0
	Flip Angle	160	Slice Spacing	1.0
	TE	105.0	<b>ACQ TIMING</b>	
	Number of Echoes	1	Freq	352
	TR	5048.0	Phase	224
	Echo Train Length	19	Freq DIR	A/P
	Receiver Bandwidth	41.67	Fat Shift DIR	Normal (A)
	<b>IMAGE ENHANCE</b>		NEX	2.00
	Filter Choice	None	Phase FOV	0.80
	<b>GATING/TRIGGER</b>		Auto Shim	Auto
	Auto Trigger Type	Off	Phase Correction	No
	<b>FMRI</b>		Flow Direction Compensation	Slice
	PSD Trigger	Internal	<b>USER CVS</b>	
	View Order	Bottom/Up	User CV18	1.00
	# of Repetitions REST	0	User CV22	1.00
	# of Repetitions ACTIVE	0	TR Min	2500.0
	<b>SAT</b>		TR Max	11000.0
	SAT Location	I	<b>MULTI-PHASE</b>	
	Tag Type	None	Seperate Series	0
	<b>TRICKS</b>		Mask Phase	0
	Pause On/Off	On	Mask Pause	0
	Auto Subtract	0	<b>DIFFUSION</b>	
Auto SCIC	2	Recon All Images	On	
		<b>CONTRAST</b>		
		Contrast Yes/No	No	

AXIAL T2W

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PATIENT POSITION		IMAGING PARAMETERS	
Patient Entry	Head First	Imaging Mode	3D
Patient Position	Supine	Pulse Sequence	SWAN
Coil Configuration	GEM Head	Imaging Options	FC, Fast, ZIP512, ZIP2, Asset
Plane	OBLIQUE		
Series Description	3D AX SWAN		
SCAN TIMING		SCAN RANGE	
Flip Angle	25	FOV	24.0
TE	50.0	Slice Thickness	2.6
Number of Echoes	8	Location per Slab	56
TR	Minimum	Overlap Locations	0
Receiver Bandwidth	35.71		
IMAGE ENHANCE		ACQ TIMING	
Filter Choice	None	Freq	320
		Phase	192
GATING/TRIGGER		Freq DIR	A/P
Auto Trigger Type	Off	Phase FOV	0.75
		Auto Shim	Auto
FMRI		Phase Correction	No
PSD Trigger	Internal	USER CVS	
View Order	Bottom/Up	User CV22	1.00
# of Repetitions REST	0	MULTI-PHASE	
# of Repetitions ACTIVE	0	Seperate Series	0
SAT		Mask Phase	0
Tag Type	None	Mask Pause	0
TRICKS		DIFFUSION	
Pause On/Off	On	Recon All Images	On
Auto Subtract	0	CONTRAST	
Auto SCIC	Off	Contrast Yes/No	No

3D AX SWAN

3D AX SWAN

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<b>PATIENT POSITION</b>		<b>IMAGING PARAMETERS</b>	
Patient Entry	Head First	Imaging Mode	2D
Patient Position	Supine	Pulse Sequence	Spin Echo
Coil Configuration	GEM Head	Imaging Options	EPI, DIFF, Asset
Plane	OBLIQUE	<b>SCAN RANGE</b>	
Series Description	Ax DWI ALL B-1000	FOV	24.0
<b>SCAN TIMING</b>		Slice Thickness	5.0
TE	Minimum	Slice Spacing	1.0
Number of Echoes	1	<b>ACQ TIMING</b>	
TR	9400.0	Freq	160
Number of Shots	1	Phase	192
<b>IMAGE ENHANCE</b>		Freq DIR	R/L
Filter Choice	None	Phase FOV	1.00
<b>GATING/TRIGGER</b>		Auto Shim	Auto
Auto Trigger Type	Off	Phase Correction	Yes
<b>FMRI</b>		<b>USER CVS</b>	
PSD Trigger	Internal	User CV0	1.00
View Order	Bottom/Up	User CV5	1.00
# of Repetitions REST	0	User CV7	1.00
# of Repetitions ACTIVE	0	User CV17	1.00
<b>SAT</b>		<b>MULTI-PHASE</b>	
Tag Type	None	Seperate Series	0
<b>TRICKS</b>		Mask Phase	0
Pause On/Off	On	Mask Pause	0
Auto Subtract	0	<b>DIFFUSION</b>	
Auto SCIC	2	Optimized TE	Yes
		Diffusion Directions	All
		Number of Diffusion Directions	3
		Number of T2 Images	1
		Dual Spin Echo	Off
		Recon All Images	On
		<b>CONTRAST</b>	
		Contrast Yes/No	No

Ax DWI ALL B-1000

Ax DWI ALL B-1000

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CORONAL OBLIQUE T2W PROPELLER	<b>PATIENT POSITION</b>		<b>IMAGING PARAMETERS</b>	
	Patient Entry	Head First	Imaging Mode	2D
	Patient Position	Supine	Pulse Sequence	PROPELLER
	Coil Configuration	GEM Head	Imaging Options	EDR, TRF, Fast, ARC
	Plane	OBLIQUE	<b>SCAN RANGE</b>	
	Series Description	CORONAL OBLIQUE T2W PROPELLER	FOV	16.0
	<b>SCAN TIMING</b>		Slice Thickness	3.0
	Flip Angle	160	Slice Spacing	0.3
	TE	118.0	<b>ACQ TIMING</b>	
	Number of Echoes	1	Freq	320
	TR	7661.0	Freq DIR	S/I
	Echo Train Length	32	Fat Shift DIR	Normal (I)
	Receiver Bandwidth	62.50	NEX	2.50
	<b>IMAGE ENHANCE</b>		Auto Shim	Auto
	Filter Choice	None	Phase Correction	No
	<b>GATING/TRIGGER</b>		<b>USER CVS</b>	
	Auto Trigger Type	Off	TR Min	3000.0
	<b>FMRI</b>		TR Max	10000.0
	PSD Trigger	Internal	<b>MULTI-PHASE</b>	
	View Order	Bottom/Up	Seperate Series	0
	# of Repetitions REST	0	Mask Phase	0
	# of Repetitions ACTIVE	0	Mask Pause	0
	<b>SAT</b>		<b>DIFFUSION</b>	
	Tag Type	None	Recon All Images	On
	<b>TRICKS</b>		<b>CONTRAST</b>	
	Pause On/Off	On	Contrast Yes/No	No
	Auto Subtract	0		
	Auto SCIC	2		

CORONAL OBLIQUE T2W PROPELLER

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PATIENT POSITION		IMAGING PARAMETERS	
Patient Entry	Head First	Imaging Mode	2D
Patient Position	Supine	Pulse Sequence	FSE-XL
Coil Configuration	GEM Head	Imaging Options	FC, EDR, TRF, Fast, ARC, T2flair
Plane	OBLIQUE		
Series Description	CORONAL OBLIQUE T2W FLAIR		
SCAN TIMING		SCAN RANGE	
Flip Angle	160	FOV	16.0
TE	140.0	Slice Thickness	3.0
Number of Echoes	1	Slice Spacing	0.3
TR	10196.0		
TI	2702	ACQ TIMING	
Echo Train Length	20	Freq	256
Receiver Bandwidth	25.00	Phase	192
		Freq DIR	S/I
		Fat Shift DIR	Normal (I)
		NEX	2.00
		Phase FOV	1.00
		Auto Shim	Auto
		Phase Correction	No
		Flow Direction Compensation	Slice
IMAGE ENHANCE		USER CVS	
Filter Choice	None	User CV18	1.00
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
View Order	Bottom/Up		
# of Repetitions REST	0	CONTRAST	
# of Repetitions ACTIVE	0	Contrast Yes/No	No
SAT			
SAT Location	I		
Tag Type	None		
TRICKS			
Pause On/Off	On		
Auto Subtract	0		
Auto SCIC	2		

CORONAL OBLIQUE T2W FLAIR

CORONAL OBLIQUE T2W FLAIR



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PATIENT POSITION		IMAGING PARAMETERS	
Patient Entry	Head First	Imaging Mode	3D
Patient Position	Supine	Pulse Sequence	Cube
Coil Configuration	GEM Head	Imaging Options	EDR, Fast, ZIP512, ZIP2, FR, ARC
Plane	OBLIQUE		
Series Description	3D Sag T1 FS Cube Post		
SCAN TIMING		SCAN RANGE	
TE	10.0	FOV	24.0
Number of Echoes	1	Slice Thickness	1.4
TR	550.0	Location per Slab	120
Echo Train Length	22	Overlap Locations	0
Receiver Bandwidth	62.50		
IMAGE ENHANCE		ACQ TIMING	
Filter Choice	G	Freq	240
		Phase	240
GATING/TRIGGER		Freq DIR	S/I
Auto Trigger Type	Off	NEX	1.00
		Phase FOV	1.00
FMRI		Auto Shim	Auto
PSD Trigger	Internal	Phase Correction	No
View Order	Bottom/Up	USER CVS	
# of Repetitions REST	0	User CV5	0.75
# of Repetitions ACTIVE	0	User CV22	3.00
SAT		MULTI-PHASE	
Tag Type	None	Seperate Series	0
Fat/Water Saturation	Fat	Mask Phase	0
		Mask Pause	0
TRICKS		DIFFUSION	
Pause On/Off	On	Recon All Images	On
Auto Subtract	0		
Auto SCIC	2	CONTRAST	
OTHERS		Contrast Yes/No	Yes
Protocol Notes	Axial reforms 1 mm x 1mm		

3D Sag T1 FS Cube Post

3D Sag T1 FS Cube Post

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PATIENT POSITION		IMAGING PARAMETERS	
Patient Entry	Head First	Imaging Mode	3D
Patient Position	Supine	Pulse Sequence	BRAVO
Coil Configuration	GEM Head	Imaging Options	EDR, Fast, ZIP512, ZIP2, ARC, IrP
Plane	OBLIQUE		
Series Description	CORONAL BRAVO POST GAD		
SCAN TIMING		SCAN RANGE	
Flip Angle	12	FOV	22.0
Number of Echoes	1	Slice Thickness	2.0
TI	450	Location per Slab	96
Receiver Bandwidth	31.25	Overlap Locations	0
IMAGE ENHANCE		ACQ TIMING	
Filter Choice	None	Freq	240
		Phase	240
GATING/TRIGGER		Freq DIR	S/I
Auto Trigger Type	Off	NEX	1.00
MULTI-PHASE		Phase FOV	1.00
Seperate Series	0	Auto Shim	Auto
Trigger Delay without AV	0	Phase Correction	No
Mask Phase	0	FMRI	
Mask Pause	0	PSD Trigger	Internal
DIFFUSION		View Order	Bottom/Up
Recon All Images	On	# of Repetitions REST	0
CONTRAST		# of Repetitions ACTIVE	0
Contrast Yes/No	Yes	SAT	
		Tag Type	None
		TRICKS	
		Pause On/Off	On
		Auto Subtract	0
		Auto SCIC	2

CORONAL BRAVO POST GAD

CORONAL BRAVO POST GAD

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PATIENT POSITION		IMAGING PARAMETERS	
Patient Entry	Head First	Imaging Mode	2D
Patient Position	Supine	Pulse Sequence	Spin Echo
Coil Configuration	GEM Head	Imaging Options	Seq, EDR, TRF, Fast, SS, ARC
Plane	3-PLANE		
Series Description	options		
SCAN TIMING		SCAN RANGE	
TE	80.0	FOV	24.0
Number of Echoes	1	Slice Thickness	10.0
TR	600.0	Slice Spacing	5.0
Receiver Bandwidth	83.33		
IMAGE ENHANCE		ACQ TIMING	
Filter Choice	None	Freq	288
		Phase	128
GATING/TRIGGER		Freq DIR	Unswap
Auto Trigger Type	Off	# of Acq. Before Pause	0
		Phase FOV	1.00
FMRI		Auto Shim	Auto
PSD Trigger	Internal	Phase Correction	No
View Order	Bottom/Up	USER CVS	
# of Repetitions REST	0	User CV1	1.00
# of Repetitions ACTIVE	0	MULTI-PHASE	
SAT		Seperate Series	0
Tag Type	None	Mask Phase	0
		Mask Pause	0
TRICKS		DIFFUSION	
Pause On/Off	On	Recon All Images	On
Auto Subtract	0	CONTRAST	
Auto SCIC	Off	Contrast Yes/No	No

options

options

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PATIENT POSITION		IMAGING PARAMETERS	
Patient Entry	Head First	Imaging Mode	3D
Patient Position	Supine	Pulse Sequence	Cube T2 FLAIR
Coil Configuration	GEM Head	Imaging Options	EDR, Fast, ZIP512, ZIP2, T2P, ARC, IrP
Plane	OBLIQUE		
Series Description	CORONAL OBLIQUE 3D T2W FLAIRCUBE		
SCAN TIMING		SCAN RANGE	
TE	131.0	FOV	16.0
Number of Echoes	1	Slice Thickness	3.0
TR	8000.0	Location per Slab	46
TI	2110	Overlap Locations	0
Echo Train Length	180		
Receiver Bandwidth	41.67	ACQ TIMING	
		Freq	220
		Phase	220
		Freq DIR	S/I
		NEX	1.00
		Phase FOV	1.00
		Auto Shim	Auto
		Phase Correction	No
IMAGE ENHANCE		FMRI	
Filter Choice	None	PSD Trigger	Internal
		View Order	Bottom/Up
		# of Repetitions REST	0
		# of Repetitions ACTIVE	0
GATING/TRIGGER		SAT	
Auto Trigger Type	Off	Tag Type	None
MULTI-PHASE		TRICKS	
Seperate Series	0	Pause On/Off	On
Mask Phase	0	Auto Subtract	0
Mask Pause	0	Auto SCIC	2
DIFFUSION			
Recon All Images	On		
CONTRAST			
Contrast Yes/No	No		

CORONAL OBLIQUE 3D T2W FLAIRCUBE

CORONAL OBLIQUE 3D T2W FLAIRCUBE