Set up the patient according to the ADNI instruction manual. Use the 8-channel brain coil.

Use the electronic ADNI protocol that has been loaded on your scanner.

NOTE: The "adni" pulse sequence used for series 2 and 3 is a works in progress pulse sequence that ADNI sites obtain from GE Healthcare.

EDIEC	1 2 plane lee	coon plane	IMAGING PARAMETERS	matrix/nex	ACQUISITION TIMING
ERIES oil	1. 3 plane loc. 8hrbrain	scan plane mode	3-plane (Whole Body gradient)	fov (cm)	256 / 128 / 1 26
ווכ :[OHDIAIH	SAT	(Whole Body gradient)	slice/space	5/5
an time	:13	SA1		autoshim	On
an ume	.13			autosiiiii	Oli
mments	Use 8-channel brain co	oil.		_	
			IMAGING PARAMETERS		ACQUISITION TIMING
ERIES	2. Sag MPRAGE	scan plane	Sag	matrix/nex	192 / 192 / 1
il	8hrbrain	mode	3D (ZOOM gradient)	phase fov	
	SCAN TIMING	pulse seq	SPGR	locs/pause	
chos	1	image opts.	EDR, IrPrep, Fast	freq. direct.	S/I
	min full	psd name	adni	fc direct	
ep time	1000		ADDITIONAL PARAMETERS	phase corr	
angle	8		Image acq. delay = 0	autoshim	On
Ū		User CVs	turbo mode = 1	1	SCANNING RANGE
v1/bw2	15.63		swap fat chem shift = 1	fov	24
			slice resolution = 100%	slice/space	1.2mm 170 locs/slab
an time	7:42		SIICE 16501011011 = 100 /0		
an time	7:42			31100/3pa00	
can time		mind the patient t	mprage mode = 1 TD or mprageTR=2400 hold still for this scan.	-	
		mind the patient t	mprage mode = 1 TD or mprageTR=2400 o hold still for this scan.	-	
	Cover skin to skin. Ren		mprage mode = 1 TD or mprageTR=2400 o hold still for this scan.	matrix/nex	ACQUISITION TIMING 192 / 192 / 1
mments	Cover skin to skin. Rei 3.MPRAGE-repeat	scan plane	mprage mode = 1 TD or mprageTR=2400 o hold still for this scan. IMAGING PARAMETERS Sag	matrix/nex	
mments	Cover skin to skin. Ren	scan plane mode	mprage mode = 1 TD or mprageTR=2400 hold still for this scan. IMAGING PARAMETERS Sag 3D (ZOOM gradient)	matrix/nex phase fov	
mments ERIES	Cover skin to skin. Ren 3.MPRAGE-repeat 8hrbrain	scan plane mode pulse seq	mprage mode = 1 TD or mprageTR=2400 hold still for this scan. IMAGING PARAMETERS Sag 3D (ZOOM gradient) SPGR	matrix/nex phase fov locs/pause	192 / 192 / 1
mments :RIES	Cover skin to skin. Res 3.MPRAGE-repeat 8hrbrain SCAN TIMING 1	scan plane mode pulse seq image opts.	mprage mode = 1 TD or mprageTR=2400 hold still for this scan. IMAGING PARAMETERS Sag 3D (ZOOM gradient) SPGR EDR, IrPrep, Fast	matrix/nex phase fov locs/pause freq. direct.	
mments ERIES il	Cover skin to skin. Ren 3.MPRAGE-repeat 8hrbrain SCAN TIMING 1 min full	scan plane mode pulse seq	mprage mode = 1 TD or mprageTR=2400 hold still for this scan. IMAGING PARAMETERS Sag 3D (ZOOM gradient) SPGR	matrix/nex phase fov locs/pause freq. direct. fc direct	192 / 192 / 1
mments ERIES il chos	Cover skin to skin. Res 3.MPRAGE-repeat 8hrbrain SCAN TIMING 1	scan plane mode pulse seq image opts.	mprage mode = 1 TD or mprageTR=2400 o hold still for this scan. IMAGING PARAMETERS Sag 3D (ZOOM gradient) SPGR EDR, IrPrep, Fast adni ADDITIONAL PARAMETERS	matrix/nex phase fov locs/pause freq. direct.	192 / 192 / 1
mments ERIES il chos ep time	Cover skin to skin. Ren 3.MPRAGE-repeat 8hrbrain SCAN TIMING 1 min full 1000	scan plane mode pulse seq image opts.	mprage mode = 1 TD or mprageTR=2400 hold still for this scan. IMAGING PARAMETERS Sag 3D (ZOOM gradient) SPGR EDR, IrPrep, Fast adni ADDITIONAL PARAMETERS Image acq. delay = 0	matrix/nex phase fov locs/pause freq. direct. fc direct phase corr	192 / 192 / 1 S/I
mments ERIES il chos ep time o angle	Cover skin to skin. Ren 3.MPRAGE-repeat 8hrbrain SCAN TIMING 1 min full	scan plane mode pulse seq image opts. psd name	mprage mode = 1 TD or mprageTR=2400 hold still for this scan. IMAGING PARAMETERS Sag 3D (ZOOM gradient) SPGR EDR, IrPrep, Fast adni ADDITIONAL PARAMETERS Image acq. delay = 0 turbo mode = 1	matrix/nex phase fov locs/pause freq. direct. fc direct	192 / 192 / 1 S/I
mments ERIES il chos ep time o angle	3.MPRAGE-repeat 8hrbrain SCAN TIMING 1 min full 1000	scan plane mode pulse seq image opts.	mprage mode = 1 TD or mprageTR=2400 hold still for this scan. IMAGING PARAMETERS Sag 3D (ZOOM gradient) SPGR EDR, IrPrep, Fast adni ADDITIONAL PARAMETERS Image acq. delay = 0 turbo mode = 1 swap fat chem shift = 1	matrix/nex phase fov locs/pause freq. direct. fc direct phase corr autoshim	192 / 192 / 1 S/I Off SCANNING RANGE
mments ERIES il chos ep time o angle v1/bw2	3.MPRAGE-repeat 8hrbrain SCAN TIMING 1 min full 1000 8	scan plane mode pulse seq image opts. psd name	mprage mode = 1 TD or mprageTR=2400 o hold still for this scan. IMAGING PARAMETERS Sag 3D (ZOOM gradient) SPGR EDR, IrPrep, Fast adni ADDITIONAL PARAMETERS Image acq. delay = 0 turbo mode = 1 swap fat chem shift = 1 slice resolution = 100%	matrix/nex phase fov locs/pause freq. direct. fc direct phase corr autoshim fov	192 / 192 / 1 S/I Off SCANNING RANGE 24
mments	3.MPRAGE-repeat 8hrbrain SCAN TIMING 1 min full 1000	scan plane mode pulse seq image opts. psd name	mprage mode = 1 TD or mprageTR=2400 hold still for this scan. IMAGING PARAMETERS Sag 3D (ZOOM gradient) SPGR EDR, IrPrep, Fast adni ADDITIONAL PARAMETERS Image acq. delay = 0 turbo mode = 1 swap fat chem shift = 1 slice resolution = 100% mprage mode = 1	matrix/nex phase fov locs/pause freq. direct. fc direct phase corr autoshim	192 / 192 / 1 S/I Off SCANNING RANGE
mments ERIES il echos ep time o angle v1/bw2	3.MPRAGE-repeat 8hrbrain SCAN TIMING 1 min full 1000 8	scan plane mode pulse seq image opts. psd name	mprage mode = 1 TD or mprageTR=2400 o hold still for this scan. IMAGING PARAMETERS Sag 3D (ZOOM gradient) SPGR EDR, IrPrep, Fast adni ADDITIONAL PARAMETERS Image acq. delay = 0 turbo mode = 1 swap fat chem shift = 1 slice resolution = 100%	matrix/nex phase fov locs/pause freq. direct. fc direct phase corr autoshim fov	192 / 192 / 1 S/I Off SCANNING RANGE 24
mments ERIES il echos ep time o angle v1/bw2	3.MPRAGE-repeat 8hrbrain SCAN TIMING 1 min full 1000 8 15.63 7:42	scan plane mode pulse seq image opts. psd name User CVs	mprage mode = 1 TD or mprageTR=2400 hold still for this scan. IMAGING PARAMETERS Sag 3D (ZOOM gradient) SPGR EDR, IrPrep, Fast adni ADDITIONAL PARAMETERS Image acq. delay = 0 turbo mode = 1 swap fat chem shift = 1 slice resolution = 100% mprage mode = 1 TD or mprageTR=2400 es 2, unless adjustment is	matrix/nex phase fov locs/pause freq. direct. fc direct phase corr autoshim fov slice/space	192 / 192 / 1 S/I Off SCANNING RANGE 24 1.2mm 170 locs/slab

(Continued on next page)

1.5T ADNI GE 12.0 M4 Software, TwinSpeed Gradient and 8-channel Brain Coil

SERIES	4. Sag B1 Cal PA	scan plane	Sag	matrix/nex	128 / 128 / 1
coil	8hrbrain	mode	3D (ZOOM gradient)	phase fov	
	SCAN TIMING	pulse seq	GRE	locs/pause	
#echos	1	image opts.	EDR, Fast	freq. direct.	S/I
te	min full	psd name		fc direct	
tr			ADDITIONAL PARAMETERS	Auto Shim	On
flip angle	2				SCANNING RANGE
etl		User CVs	Image acq. delay = 0	fov	30
bw1/bw2	62.5		Turbo Mode = 1	slice/space	2.5mm locs/slab=96
scan time	:36		Slice resolution = 100%		
	Cover alsia to alsia				
comments	Cover skin to skin.				
SERIES	5. Sag B1 Cal PA	scan plane	Sag	matrix/nex	128 / 128 / 1
coil	BODŸ	mode	3D (ZOOM gradient)	phase fov	
	SCAN TIMING	pulse seq	GRE	locs/pause	
#echos	1	image opts.	EDR, Fast	freq. direct.	S/I
te	min full	psd name	,	fc direct	
tr		'	ADDITIONAL PARAMETERS	Auto Shim	Off
flip angle	2				SCANNING RANGE
etl		User CVs	Image acq. delay=0	fov	30
bw1/bw2	62.5		Turbo Mode =1	slice/space	2.5mm locs/slab=96
scan time	:36		Slice resolution = 100%	•	
		_			
comments			Bhrbrain coil plugged in, bu		e to Body Coil
	(In other words, select "A	Apply ".) Same i	mage locations as series 4		
OFFIC					
SERIES	0. A., DD/T0. E0E	7	IMAGING PARAMETERS		ACQUISITION TIMING
coil	6. Ax PD/T2 FSE	scan plane mode	Ax 2D (ZOOM gradient)	matrix/nex phase fov	256 / 256 / 1 0.9
	8hrbrain		2D (ZOOM gradient) FSE-XL	•	
,, ,	SCAN TIMING	pulse seq		acqs/pause	0
#echoes	2	image opts.	EDR, Fast	freq. direct.	A/P
te	min full / TE2=100	psd name		fc direct	
TR	3000		ADDITIONAL PARAMETERS	Autoshim	Off
flip angle				phase corr	
etl	16	User CVs	blurring cancellation=0		SCANNING RANGE
bw1/bw2	20.83			fov	24
scan time	6:25			slice/space	48 loc, 3mm interleaved
		→			

Series 6 is the final patient series.

comments

Follow the ADNI instructions to complete the phantom scans.

Prescribe 48 slices to cover head.

Accept change back to 8-channel Brain Coil. (In other words, select "Apply".)