University Health™	Policy #: Rad Proc 14. 14. 31
SUBJECT: DWI L-SPINE	**Effective: 10/1/2013** **Reviewed: 2/2015: 2/2017**
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Purpose: To provide MRI staff with approved protocol for performing a DWI L-SPINE MR

ORIENTATION: HEAD FIRST/SUPINE **Coil: HNS CTL456/USC456/HD BODY FULL**

EXAM: L-SPINE

PLANE	3 PLN LOC	CALIBRATION	SAG DWI b400	OP AX DWI b400
SEQ	GRE	GRE	SE	SE
MODE	2D	2D	2D	2D
IMAGING OPTIONS	SEQ/FAST	FAST/CALIB	EPI/DIFF/ASSET	EPI/DIFF/ASSET
TE			MIN	MIN
TR			4000 ms+	4000 ms+
TI				
FLIP ANGLE				
ETL				
BW				
FOV	44	35	28	24
SLICE THICKNESS	10	15	4	4
SLICE SPACING	1	0	0	0
Frequency	256		128	128
Phase	128		128	128
NEX	1			
PHASE FOV	1		1	1
FREQ DIR	UNSWAP	R/L	S/I	A/P
FLOW COMP DIR				
SHIM	AUTO	AUTO	AUTO	AUTO
PHASE CORRECT	OFF	OFF	ON	ON

NOTES: You may increase the FOV if needed. Do not increase the slice thickness or slice spacing. Leave the frequency direction as S/I. The best b-values for diffusion spine imaging range between 200 and 600. Dr. Toledo has selected a b-value of 400 for our diffusion spine imaging. The b-value is set at 400, the NEX is set at 16, and the diffusion direction is set at R/L. Optimize TE is on and dual spin echo is off. These settings must remain as they are to result in a quality image/ADC map. Also, acquire the images in the true sagittal and axial planes. No OBL scans. Asset must be on. REPROCESSING: Go into functool and click ADC. Make sure all green dots are removed from the image. You should only see green lines. Use the slide bars to adjust the threshold.

Note: Additional sequences may be requested at the discretion of the Radiologist monitoring the exam

Click next twice and right click on the right lower sagittal image and select color ramps. Change the color to grey levels. Next, select the advanced settings button. Click on custom and change the confidence level to 0.9. Select done and then compute. Next, select film/save/report and functional maps. Select all and multiple locations and then select next. Next, select save a processed images and save. Send the diffusion imaging sequence and the eADC and ADC maps to PACS

Note: Additional sequences may be requested at the discretion of the Radiologist monitoring the exam.