

**PROTOCOL: STERNOCLAVICULAR JOINTS**

**COIL:** HIGH CHANNEL COUNT (12+) BODY ARRAY OR (8+) FLEX COIL; COIL-IN-TABLE SYSTEMS MAY USE POSTERIOR ARRAY COIL ELEMENTS

**POSITIONING:** Prone with arms at sides if patient is able. Turn head to one side or the other.

**CLINICAL INDICATIONS/HISTORY:** WO: FX, TRAUMA, PAIN | WWO: INFECTION/OSTEOMYELITIS, MASS, TUMOR

**PLOTTING:** Axial = axial to manubrium in midline centered at SC joints    Coronal = coronal to manubrium in midline centered at SC joints    Sagittal = true sagittal

**COVERAGE:** Axial: from above top of medial clavicle through manubrium    Coronal: through entire SC joints including all bone and ligaments    Sagittal: include bilateral SC joints entirely, medial clavicle to medial clavicle

**TIPS:** Motion artifact minimized if sternum is placed on table-prone position Phase encoding placed so motion artifact does not go thru SC joints

SCAN ORDER	PLANE	IMAGE CONTRAST/WEIGHTING	MODE/SEQ TYPE	Averages (NEX)	BW (Hz/pixel)	ETL	TR RANGE	TE RANGE	TI	FLIP ANGLE	SLICE/GAP (mm)	FOV (cm)	Resolution	Phase Axis	Send to PACS	Fat sat
1	AX	STIR	2D/FSE	1	150-180	8-12	3500-6000	20-30	140 - 150	>130	3/0	15-18	256 x 256	RL	FULL SERIES	
2	AX	T1	2D/FSE	1	150-180	2-3	450-650	8-10		>130	3/0	15-18	256 x 256	RL	FULL SERIES	NONE
3	COR	PDFS	2D/FSE	1	150-180	8-12	3500-6000	38-42		>130	3/0	15-18	256 x 256	RL	FULL SERIES	WEAK
4	COR	PD	2D/FSE	2	150-180	8-12	3500-6000	38-42		>130	3/0	15-18	512 x 320	RL	FULL SERIES	NONE
5	SAG	STIR	2D/FSE	1	150-180	8-12	3500-6000	20-30	140 - 150	>130	3/0	15-18	256 x 256	AP	FULL SERIES	

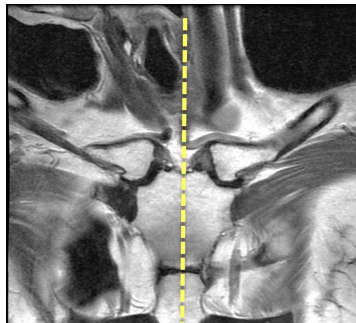
**STOP HERE IF NO CONTRAST**

IF WO/W PRE-GAD: 6	AX	T1FS	2D/FSE	1	150-180	2-3	450-650	8-10		>130	3/0	15-18	256 X 256	RL	FULL SERIES	WEAK
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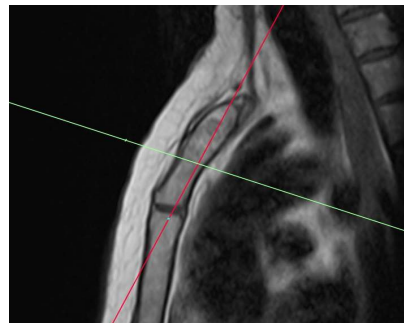
**GIVE CONTRAST**

POST-GAD: 7	AX	T1FS	2D/FSE	1	150-180	2-3	450-650	8-10		>130	3/0	15-18	256 X 256	RL	FULL SERIES	WEAK
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POST-GAD: 8	COR	T1FS	2D/FSE	1	150-180	2-3	450-650	8-10		>130	3/0	15-18	256 x 256	RL	FULL SERIES	WEAK
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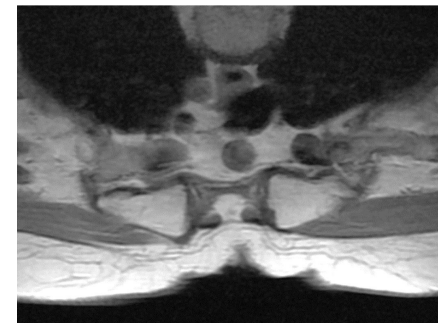
CORONAL IMAGE OF S-C JOINTS SHOWING SAGITTAL PLANE



SAGITTAL IMAGE OF STERNUM SHOWING AXIAL AND CORONAL PLANES



SAGITTAL IMAGE OF STERNUM SHOWING AXIAL PLANE



AXIAL IMAGE THROUGH S-C JOINTS