

Non Contrast Indications:	stenosis, radiculopathy, myelopathy, trauma, MS
Contrast Indications:	stenosis, radiculopathy, myelopathy, infection, tumor, syrinx, MS
Position:	head first, supine, center at mid neck
FOV:	T1 to craniocervical junction, use anterior sat band, avoid excessive FOV

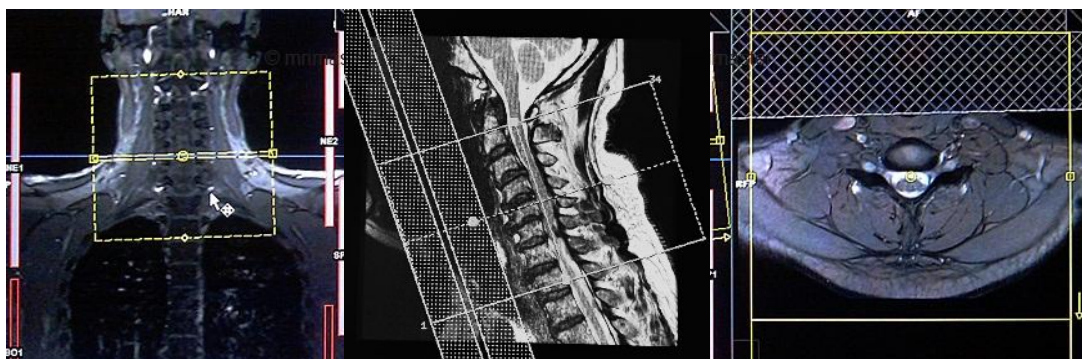
SEQUENCE	FOV	S/S	COMMENTS / POSITIONING TIPS
SAG T1 FSE/TSE	FOV 200	3.0/0.3	Adjust FOV to cover C-spine   parallel to cord on coronal view
SAG T2 FSE/TSE	FOV 200	3.0/0.3	
SAG STIR FSE/TSE	FOV 200	3.0/0.3	
AX T2 CUBE / SPACE	FOV 180	2mm	FOR TRAUMA: mid T1 to mid clavus
AX 2D MERGE / MEDIC	FOV 180	3.0/0.3	FOR TRAUMA: mid T1 to mid clavus
<b>TRAUMA</b>			
COR T2	FOV 200	2-3mm	Mid T1 through craniocervical junction, see photos
<b>CONTRAST</b>			
myelopathy: cord tumor, MS, infection, cord compression, syrinx			
SAG T1 GD FS	FOV 200	3.0/0.3	No Fat Sat for MS patients
AX T1 GD	FOV 200	3.0/0.3	

**SAGITTAL**



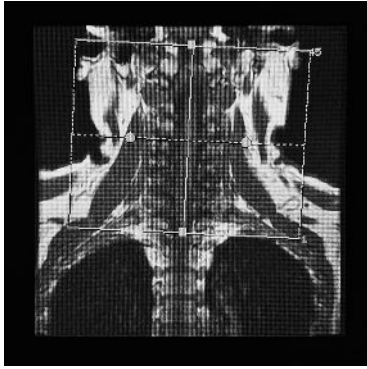
Alignment:	**Angle slices parallel to spinal cord using coronal localizer**
Coverage:	T1 to above foramen magnum, limit FOV to C-spine, thru transverse processes LT to RT
Saturation Band:	In front of esophagus in sagittal plane to avoid swallowing artifacts

**AXIAL**



Alignment:	perpendicular to spinal cord
Coverage:	Mid T1 - C2
Saturation Band:	In front of esophagus in sagittal plane to avoid swallowing artifacts
	MERGE sat band: two bands next to each other

### AXIAL TRAUMA



Alignment: perpendicular to spinal cord

Coverage: mid T1 to Clivus (above foramen magnum)

Saturation Band: In front of esophagus in sagittal plane to avoid swallowing artifacts

### CORONAL TRAUMA



Alignment: parallel to spinal cord

Coverage: thru craniocervical joint to include atlantoaxial joint

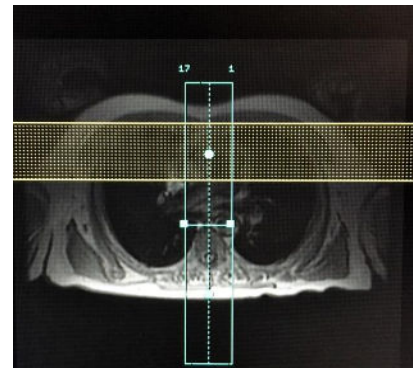
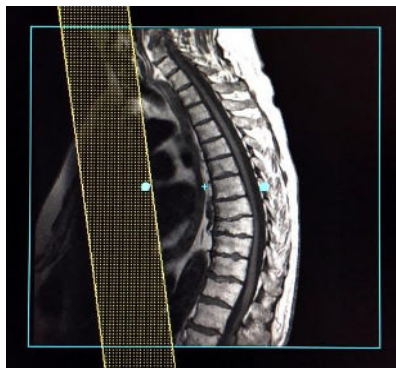
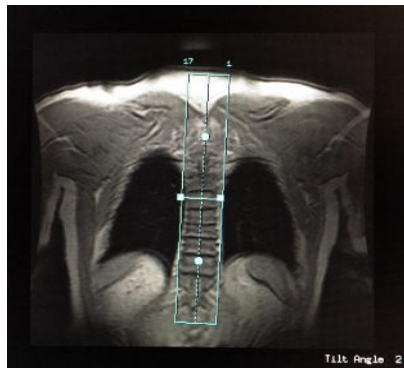
# THORACIC SPINE

12/15/2022

Non Contrast Indications:	stenosis, radiculopathy, myelopathy, trauma
Contrast Indications:	stenosis, radiculopathy, myelopathy, cord compression, infection, tumor, syrinx, MS
Position:	head first, supine, center over mid sternum
FOV:	L1 to C7, use anterior sat band, avoid excessive FOV

	FOV	S/S	COMMENTS / POSITIONING TIPS
SAG COUNTING LOCALIZER			Please send counting localizer to impax
SAGITTAL T1	FOV 340	3.0/0.3	Adjust FOV to cover from L1- C7   parallel to cord on coronal view
SAGITTAL T2	FOV 340	3.0/0.3	
SAGITTAL STIR	FOV 240	3.0/0.3	
AXIAL T2 BLOCK	FOV 340	4.0/1.0	Cover L1 to C7, split/angle as needed for kyphotic patients
<b>CONTRAST</b>	myleopathy: cord tumor, MS, post surgical, cord compression, syrinx		
SAGITTAL T1 GD FS	FOV 340	3.0/0.3	
AX T1 GD BLOCK	FOV 200	4.0/1.0	
<b>IF CONTRAST</b>			
AX T1 PRE BLOCK	FOV 200	4.0/1.0	
<b>FOR INFECTION</b>			
AX T1 PRE BLOCK	FOV 200	4.0/1.0	
SAGITTAL T1 GD FS	FOV 340	3.0/0.3	
AXIAL T1 GD FS	FOV 200	4.0/1.0	

## SAGITTAL

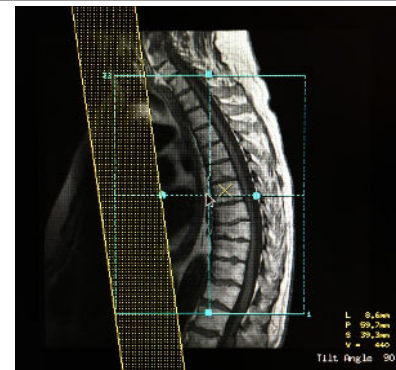


*Alignment:* \*\*Angle slices parallel to spinal cord using coronal localizer\*\*

*Coverage:* L1 to C7, limit FOV to T-spine, thru transverse processes from LT to RT

*Saturation Band:* Place sat band over chest anterior to spine

## AXIAL POST



*Alignment:* perpendicular to spinal cord, split/angle as needed for kyphotic patients

*Coverage:* Perpendicular to cord, Mid L1 to Mid C7, split into 2 blocks as needed for kyphosis

*Saturation Band:* Place sat band over chest anterior to spine

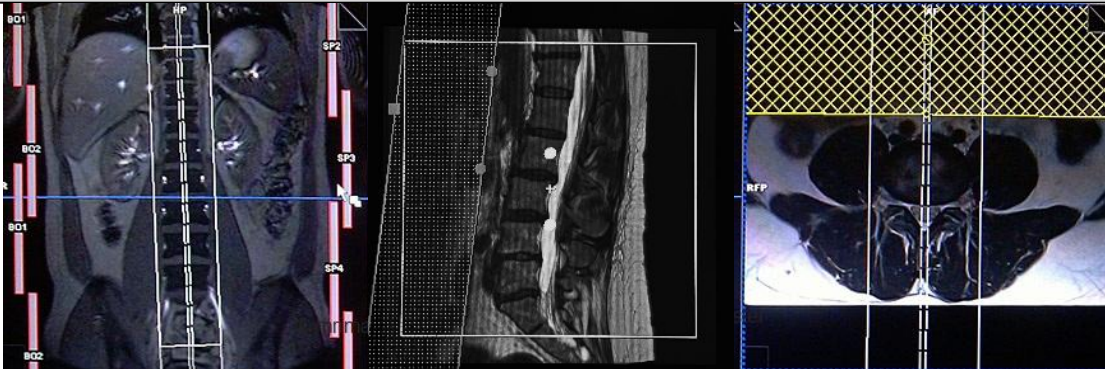
# LSPINE

12/15/2022

Non Contrast Indications:	stenosis, radiculopathy, myelopathy, trauma
Contrast Indications:	stenosis, radiculopathy, myelopathy, cord compression, infection, tumor, syrinx
Position:	supine, center 4 inches above crest
FOV:	S1 to T12, use anterior sat band, avoid excessive FOV

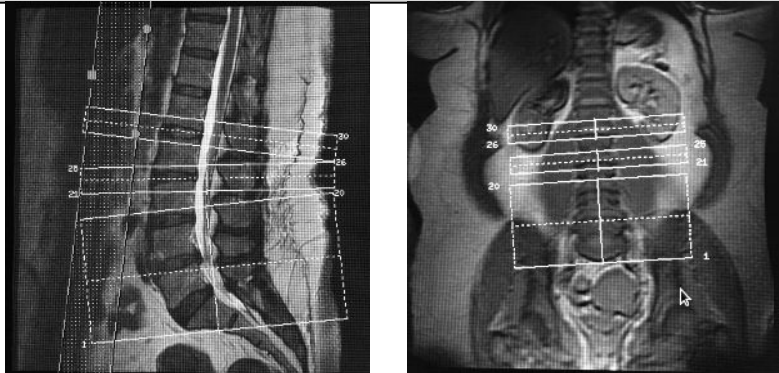
	FOV	S/S	COMMENTS	POSITIONING TIPS
SAGITTAL T1	FOV 250	4.0/0.4	Adjust FOV to cover from T12-S1	parallel to cord on coronal view
SAGITTAL T2	FOV 250	4.0/0.4		
SAGITTAL STIR	FOV 250	4.0/0.4		
AXIAL T2	FOV 200	4.0/0.5	Radiculopathy: 1st block cover S1-L3, 2nd block L3-L2 space, 3rd block L2-L1 space Myelopathy / Post Surgery / FX : block to cover entire cord	
AXIAL T1	FOV 200	4.0/0.5	Radiculopathy: 4 slices through all 5 disc spaces Myelopathy / Post Surgery / FX : block to cover entire cord	
<b>CONTRAST</b>	myelopathy: cord tumor, post surgical, cord compression			
SAGITTAL T1 GD FS	FOV 250	4.0/0.4		
AXIAL T1 GD BLOCK	FOV 200	4.0/0.5		
<b>INFECTION</b>	block to cover entire cord on axials pre & post			
SAGITTAL T1 GD FS	FOV 250	4.0/0.4		
AXIAL T1 GD FS BLOCK	FOV 200	4.0/0.5		

## SAGITTAL



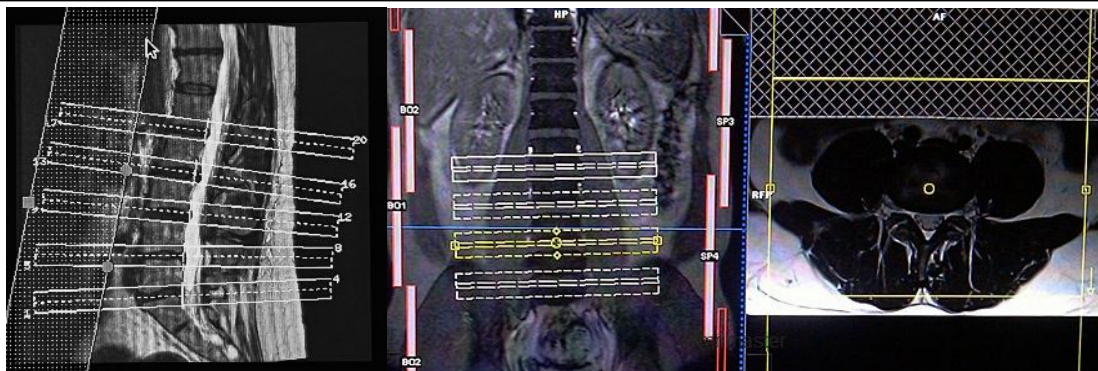
<i>Alignment:</i>	**Angle slices parallel to spinal cord using coronal localizer**
<i>Coverage:</i>	Cover from S1 up to T12, through transverse processes LT to RT, limit excessive FOV
<i>Sat Band:</i>	Placed over abdomen in front of aorta to avoid peristalsis and breathing artifacts

## AXIAL T2 (RADICULOPATHY)



<i>Alignment:</i>	Align slices to intervertebral disc spaces on coronal and sagittal images
<i>Coverage:</i>	Radiculopathy : 1st block cover S1-L3, 2nd block L3-L2 space, 3rd block L2-L1 space Myelopathy / Post Surgery / FX : full block to cover S1 to mid T12
<i>Sat Band:</i>	Placed over abdomen in front of aorta to avoid peristalsis and breathing artifacts

### AXIAL T1 (RADICULOPATHY)



<i>Alignment:</i>	Align slices to intervertebral disc spaces on coronal and sagittal images
<i>Coverage:</i>	Radiculopathy: 4 slices through all 5 disc spaces / Myelopathy: block to cover entire cord
<i>Sat Band:</i>	Placed over abdomen in front of aorta to avoid peristalsis and breathing artifacts

### AXIAL BLOCK

<i>Alignment:</i>	Perpendicular to spinal cord
<i>Coverage:</i>	Myelopathy / Post Surgery / FX : full block to cover S1 to mid T12
<i>Sat Band:</i>	Placed over abdomen in front of aorta to avoid peristalsis and breathing artifacts

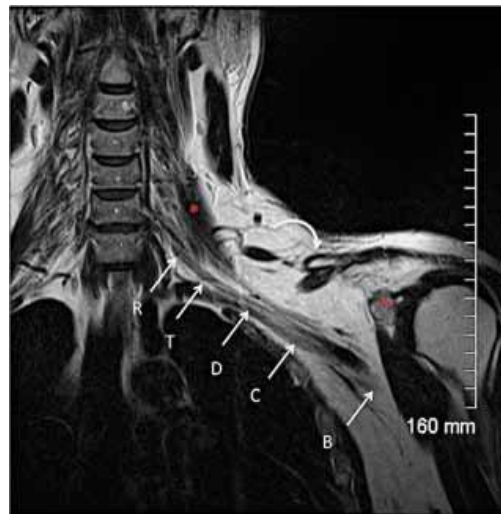
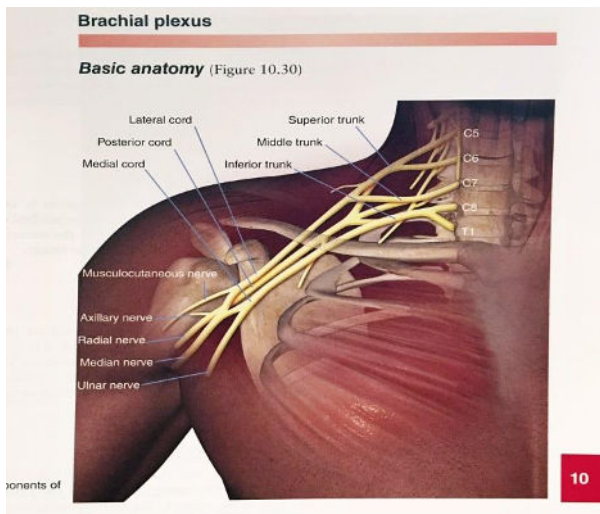
# BRACHIAL PLEXUS

12/15/2022

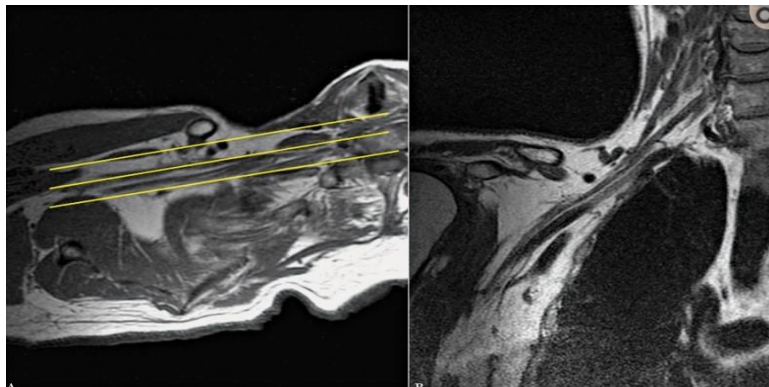
Indications:	weakness/numbness of upper extremity, tumor, peripheral neuropathy, trauma
Position:	Head first, supine / center on sternoclavicular joint
FOV:	C3 - T4 / spinal cord to affected side shoulder joint

	FOV	S/S	COMMENTS	POSITIONING TIPS
COR STIR Bilateral	40	3.0/0.0		
COR T1 OBL unilateral	24	3.0/0.0		
AX T1 OBL unilateral	24	3.0/0.0		
AX T2 FS OBL unilateral	24	3.0/0.0		
SAG T1 OBL unilateral	20	3.0/0.0		
SAG STIR OBL unilateral	20	3.0/0.0		
<b>CONTRAST</b>				
AX T1 OBL GD FS unilateral	24	3.0/0.0		
SAG T1 OBL GD FS unilateral	20	3.0/0.0		
COR T1 OBL GD FS unilateral	24	3.0/0.0		

The brachial plexus is a nerve plexus formed by nerve roots C5, C6, C7, C8 & T1

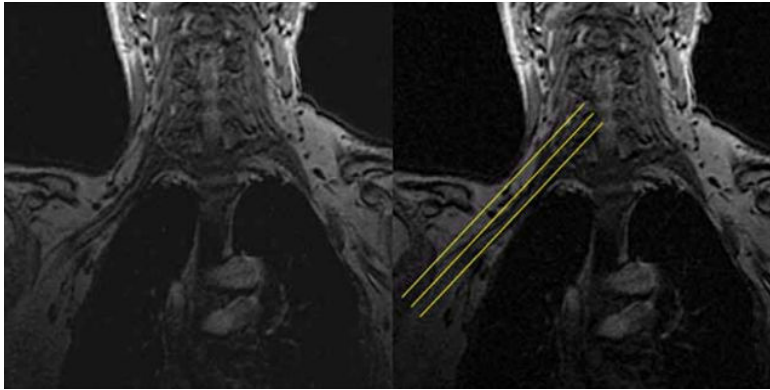


## CORONAL OBLIQUE



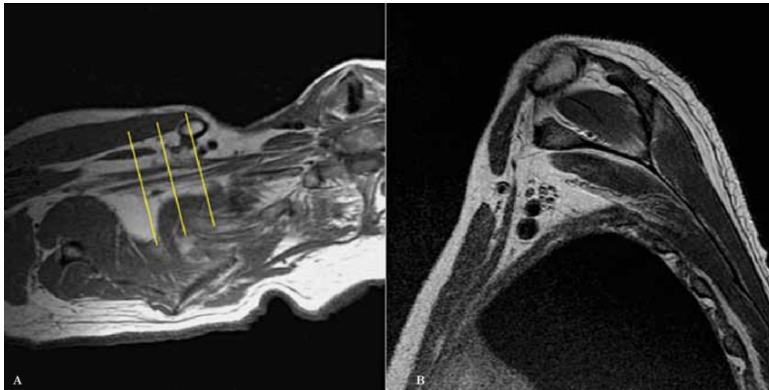
<i>Alignment:</i>	parallel to the brachial plexus on axial view
<i>Coverage:</i>	slices to include vertebrae to SC joint, FOV to include spine to affected shoulder joint
<i>Phase:</i>	R/L to avoid chest and heart motion artifacts

### AXIAL OBLIQUE



*Alignment:* parallel to brachial plexus on coronal view  
*Coverage:* FOV to include spine to affected side shoulder joint  
*Phase:* A/P with NPW to reduce pulsation and swallowing artifacts

### SAGITTAL OBLIQUE



*Alignment:* perpendicular to brachial plexus on axial & coronal view  
*Coverage:* slices to include spinal cord to affected side shoulder joint.  
*Phase:* A/P with NPW to reduce pulsation and swallowing artifacts

## LUMBOSACRAL PLEXUS

12/20/2022

Indications:	malignancy, treatment planning, plexopathy, sacral or coccyx pain, leg pain, sciatica, trauma
Position:	feet first, supine / center over crest

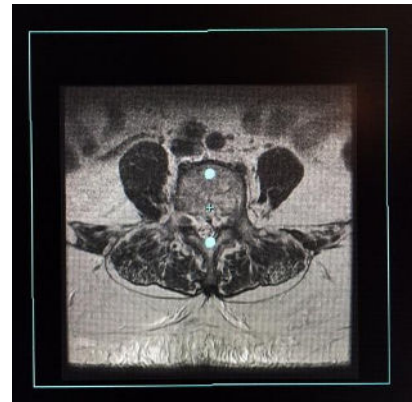
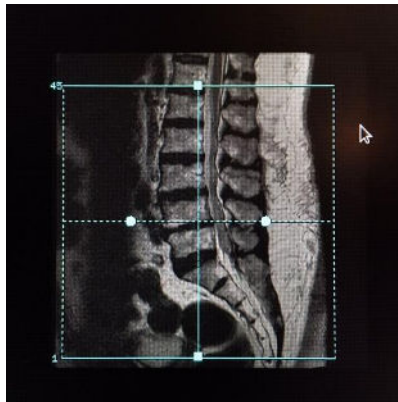
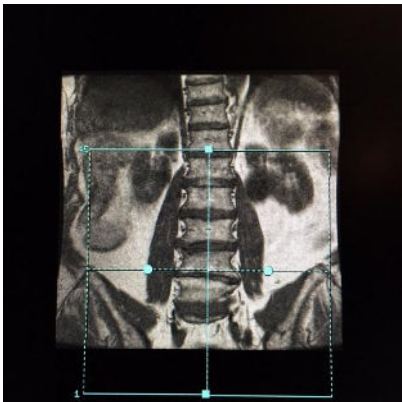
	FOV	S/S	COMMENTS	POSITIONING TIPS
CORONAL STIR OBL	FOV 34	4.0/0.5	oblique to sacrum, include hip joints	
COR T1 OBL	FOV 34	4.0/0.5		
COR T2 FS OBL	FOV 34	4.0/0.5		
AXIAL T2 FS	FOV 26	4.0/1.5		
AXIAL T1	FOV 26	4.0/1.5		
<b>CONTRAST</b>				
CORONAL T1 FS GD OBL	FOV 34	4.0/0.5		
AXIAL FS GD	FOV 26	4.0/1.5		

### CORONAL OBLIQUE



<i>Alignment:</i>	angle slices to sacrum on sagittal, check other planes
<i>Coverage:</i>	L2 to below greater trochanter

### AXIAL



<i>Alignment:</i>	angle slices perpendicular to spinal canal on sagittal, check other planes
<i>Coverage:</i>	L2 to below greater trochanter

