

Spine

Protocol	Use	Note	Sequences
<p>Spine - Cervical</p> <p>30 minutes no gad or post gad only 45 minutes pre/post contrast</p>	<p>(1) no gad (as-is):</p> <ul style="list-style-type: none"> - routine cervical spine - degenerative disc disease, radiculopathy, myelopathy - follow-up post op decompression (ex: ACDF) or other surgery (but not for cord tumor follow-up) <p>(2) pre/post gad (add “gad”):</p> <ul style="list-style-type: none"> - baseline cord tumor imaging <p>(3) post-gad only (add “post-gad only”):</p> <ul style="list-style-type: none"> - follow-up cord tumor (only if previous baseline imaging is available to compare) 		<p>Sag T1 C/S Sag T2 C/S Sag T2 3D Space C/S (recon Ax 1mm)</p> <p>--- if –Contrast Sag T1 C/S Sag T2 C/S Ax T1 (through area) Injection Ax T1 post gad (through area) Sag T1 C/S post gad</p> <p>--Post gad only Sag T1 C/S post gad Sag T2 C/S post gad Ax T1 post gad (through area)</p>
<p>Spine - Cervical Trauma</p>	<ul style="list-style-type: none"> - if history of trauma, to r/o acute injury 	<ul style="list-style-type: none"> - has Sag T2 STIR in addition to routine C-spine 	<p>Sag T1 Sag T2 Sag T2 3D Space (recon Ax 1mm) Sag T2 STIR</p>

<p>Spine - Thoracic</p>	<p>(1) no gad (as-is): - routine thoracic spine - degenerative disc disease, radiculopathy, myelopathy - follow-up post op decompression</p> <p>(2) pre/post gad (add "gad"): - baseline cord tumor imaging</p> <p>(3) post-gad only (add "post-gad only"): - follow-up cord tumor (only if previous baseline imaging is available to compare)</p>		<p>Sag T1 T/S Sag T2 T/S Ax T2 (through ROI)</p> <p>--- if –Contrast Sag T1 T/S Sag T2 T/S Ax T1 (through area) Injection Ax T1 post gad (through area) Sag T1 T/S post gad</p> <p>- -Post gad only Sag T1 T/S post gad Sag T2 T/S post gad Ax T1 post gad (through area)</p>
<p>Spine - Thoracic Trauma</p>	<p>- if history of trauma, to r/o acute injury</p>	<p>- has Sag T2 STIR in addition to routine T-spine</p>	<p>Sag T1 T/S Sag T2 T/S Ax T2 (through ROI) Sag T2 STIR T/S</p>
<p>Spine - Lumbar</p>	<p>(1) no gad (as-is): - routine lumbar spine - degenerative disc disease, spinal canal stenosis, radiculopathy</p> <p>(2) pre/post gad (add "gad"): - baseline cord tumor imaging</p> <p>(3) post-gad only (add "post-gad only"): - follow-up cord tumor (only if previous baseline imaging is available to compare)</p>		<p>Sag T1 Sag T2 Ax 3D T2 (L3-S1)</p>

Spine - Lumbar (postop w Gad)	- for history of prior lumbar surgery (ie: laminectomy/discectomy)	- done with added post-contrast sequences	Sag T1 Sag T2 Ax T2 Ax T1 ---Injection Ax T1 post gad Sag T1 post gad
Spine - Lumbar Trauma	- if history of trauma, to r/o acute injury	- includes additional Sag STIR c/t routine lumbar spine	Sag T1 Sag T2 Ax 3D T2 (L3-S1) Sag T2 STIR
Spine - Lumbar (Marfan)	- for assessing dural ectasia and pedicle thickness in Marfan patients		Sag T2 Cor Obl T2 Sacrum Ax T1 (L1-S1)
Sacrum (No gad) 30 minutes	(1) no gad (as-is): - use either alone or in combination with L-spine protocol - use only if dedicated imaging of the sacrum is requested -often done for inflammatory arthropathy -contains STIR to assess for edema (2) pre/post gad (add "gad"): - add gad if need to r/o infection/osteomyelitis - ask for T1 post-gad imaging with fat sat		Sag T1 Sag T2 Cor Obl T1 Cor Obl T2 STIR Ax Obl T1 Ax T1

<p>Spine – Cauda Equina</p> <p>(No gad)</p> <p>30 minutes</p>	<p>- use for “rule out cauda equina” or related symptom history</p> <p>- if known history of malignancy, do whole spine protocol</p>	<p>- has routine lumbar spine sequences plus a Sag T2 of the T-spine</p>	<p><u>Lumbar spine</u></p> <p>- Sag T2</p> <p>- Sag T1</p> <p>- Ax 3D T2 (L3-S1)</p> <p><u>Thoracic spine</u></p> <p>- Sag T2</p> <p>- Ax T2 (through ROI)</p>
<p>Spine - MS Screen</p>	<p>- very limited screening of spine for MS</p> <p>- often done as a quick adjunct to brain imaging for a thorough MS screening assessment</p>	<p>Only sagittal T2 of cord (C /T spine)</p>	<p>Sag T2 C/S</p> <p>Sag T2 T/S</p> <p>Ax T2 (through ROI)</p>
<p>Spine – Kyphoplasty Assessment (2 station)</p>	<p>- should be specifically asked for in the requisition</p> <p>- often ordered by Dr. Smith or Dr. Murphy</p>	<p>Met Spine 2stn protocol with added Sag STIR upper and lower</p>	<p>Sag T1 upper + lower</p> <p>Sag STIR upper + lower</p> <p>Sag T2 upper + lower</p> <p>Ax T2 (through ROI)</p> <p>Cor Obl T1 Sacrum</p>
<p>Spine - Mets/Whole (2 station) (bone mets/CC)</p> <p>(No gad)</p> <p>30 minutes</p>	<p>- This is the routine protocol for screening for bone mets and myeloma, for cord compression</p> <p>- Not to be done if giving gad/cord tumour etc.</p>	<p>- Sag sequences done in 2 parts (upper/lower spine)</p> <p>- coverage: cerebellum to entire sacrum</p> <p>- Axials only through indicated area or through cord compression</p>	<p>Sag T2 upper + lower</p> <p>Sag T1 upper + lower</p> <p>Ax T2 (through ROI)</p> <p>Cor Obl T1 Sacrum</p>
<p>Spine - Mets/Whole pre + post gad (2 station)</p> <p>45 minutes</p>	<p>- if need to assess for both marrow signal (for bone mets) and leptomeningeal/cord disease</p>	<p>Axials only through indicated area or through cord compression</p>	<p>Sag T2 upper + lower</p> <p>Sag T1 upper + lower</p> <p>Ax T1 (through ROI)</p> <p>Cor Obl T1 Sacrum</p> <p>--Injection</p> <p>Sag T1 upper + lower post gad</p> <p>Ax T1 (through ROI) post</p>

			gad
Spine - Mets/Whole post gad only (2 station) 45 minutes	- If only concerned for leptomeningeal disease and not bone mets - reason: bone marrow signal cannot be reliably assessed on T1 post gad imaging only	- no pre-gad T1 imaging Axials only through indicated area or through cord compression	--Injection Sag T1 upper + lower post gad Ax T1 (through ROI) post gad Sag T2 upper + lower post gad Cor Obl T1 Sacrum post gad
Spine – Infection screen (no gad)	- use to screen for osteomyelitis/discitis in whole spine - often done as initial test, and then once site is identified, follow-up with targeted imaging with “Spine – F/U infection/discitis” protocol	- coverage from cerebellum to sacrum - like “mets/whole 2 station”, but with STIR imaging added	Sag STIR upper + Lower Sag T2 upper + lower Sag T1 upper + lower Ax T2 (through ROI)
Spine – F/U infection/discitis (Specify levels)	- targeted examination to follow-up known level of discitis/osteomyelitis		Sag T1 Sag T2 --Injection Sag T1 FS post gad Ax T1 FS post gad
Spine – Ateco MRA (Indicate levels) (45 minutes one level - additional levels each 30 minutes)	- MRA of the spine - Used to either rule out or follow up dural AV fistula	- need to indicate level (coverage is ~30 cm, usually from T2 to L2) - includes routine pre-gad imaging of the spine at the specified level	Sag T1 Sag T2 Ax T2 --Injection Sag MRA Sag T1 post gad Ax T1 post gad
Neuro B/Plexus	- do not use - if requisition requests brachial plexus imaging, hit “suspend” and then “another division to protocol” – in the comments		<u>C/S</u> Sag T1 C/S Sag T2 C/S Sag T2 3D Space C/S (recon Ax 1mm) <u>B/Plexus</u>

	indicate "MSK or chest imaging"		Cor T2 (bilateral) Ax T1 Flair --optional gad add Cor STIR (bilateral) --Injection Cor T1 FS post gad (bilateral)
Spine + Brain – Myelo_CSF Leak No gad 45 minutes	- for workup of patients with known intracranial hypotension - done to try and identify the presence of a CSF leak in the spine - very limited imaging of brain	- Dr. Farb should know about these patients	--Spine Sag T1 upper and lower Sag T2 – 3 parts Sag T2 Space upper and lower (Recon Ax 2mm) --Brain Sag T1 Ax t2 Flair
Spine + Brain – NF Surveillance (no gad) No gad – 45 minutes	- for follow-up of NF2 patients	- done without gad - can recall the patient for gad imaging of spine if necessary	--Spine Sag T1 upper and lower Sag T2 Space upper and lower (Recon Ax 2mm) --Brain – Express IAC Sag T1 Ax T2 Flair AX DWI Ax GRE/SWI Cor T1 Loc (for IAC) Ax T2 Space (IAC)
Spine - MSK Inflammatory w/ SI joints	- complete spine and SI joint assessment for patients with inflammatory/seronegative spondyloarthrophy	- these are reported by MSK radiologists	--Spine Sag T1 C/T/L Sag T2 C/T/L ---SI Joints Cor Obl T1 Cor Obl T2 STIR Ax Obl T1 Ax Obl T2 STIR