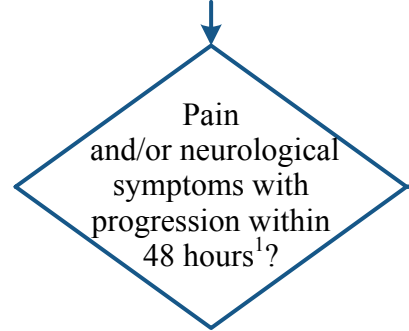


Spinal Cord Compression Management in Cancer Patients

This practice algorithm has been specifically developed for MD Anderson using a multidisciplinary approach and taking into consideration circumstances particular to MD Anderson, including the following: MD Anderson's specific patient population; MD Anderson's services and structure; and MD Anderson's clinical information. Moreover, this algorithm is not intended to replace the independent medical or professional judgment of physicians or other health care providers. This algorithm should not be used to treat pregnant women.

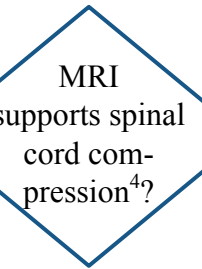
PATIENT PRESENTATION

Suspected spinal cord compression (*severe pain or abnormal neurology, or incidental finding on MRI; not intended for traumatic injuries. If in emergency center, triage patient as emergent.*)



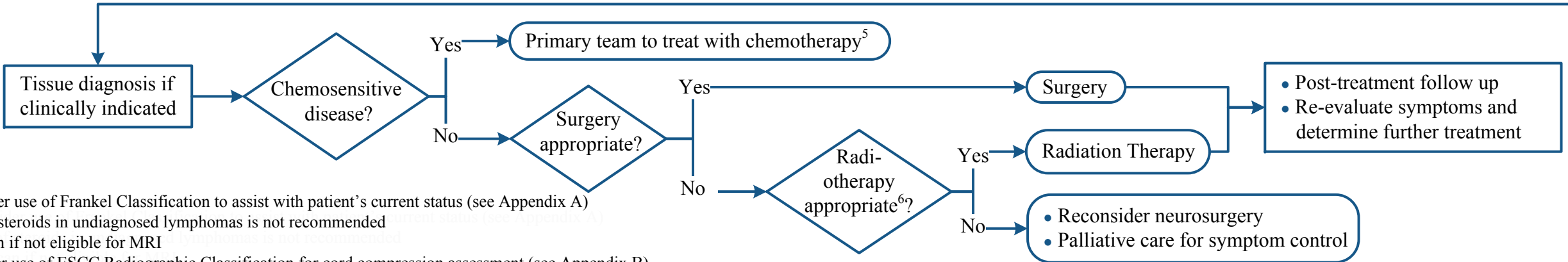
Yes
No

- Emergent treatment as follows:
- Dexamethasone² 10 mg STAT followed by 16 mg daily in divided doses (taper over 2 weeks)
 - Obtain urgent MRI³ of entire spine without contrast (to be reviewed by Radiologist while patient in MRI to evaluate for addition of contrast)
 - Consider bed rest (no walking)
 - If cervical spine lesions suspected place patient in Philadelphia Collar
 - Baseline neurological exam followed by serial neurological exams after steroid treatment
- Consider Dexamethasone² 10 mg followed by 16 mg daily in divided doses (taper over 2 weeks)
- Obtain MRI³ of entire spine without contrast during this encounter (to be reviewed by Radiologist while patient in MRI to evaluate for addition of contrast)



Yes
No

- Attending physician initiates discussions to determine appropriate treatment (considering spine stability, extent of disease, performance status, prognosis) with:
- Patient
 - Primary physician regarding prognosis
 - If neurological deficits: emergent Neurosurgical Consult and Radiotherapy Consult
 - If suspected spinal instability: emergent Neurosurgical consult
 - If patient neurologically intact: admit for further evaluation by primary service and notify Radiation Oncology and Neurosurgery of patient status and consult
 - If question whether signs and symptoms correlate with MRI: consider Neurology Consult
 - Consider Pain Consult if clinically indicated
 - Consider Infectious Disease Consult if clinically indicated
- Further work-up by treating physician
- Notify Neurosurgery if suspected spinal instability



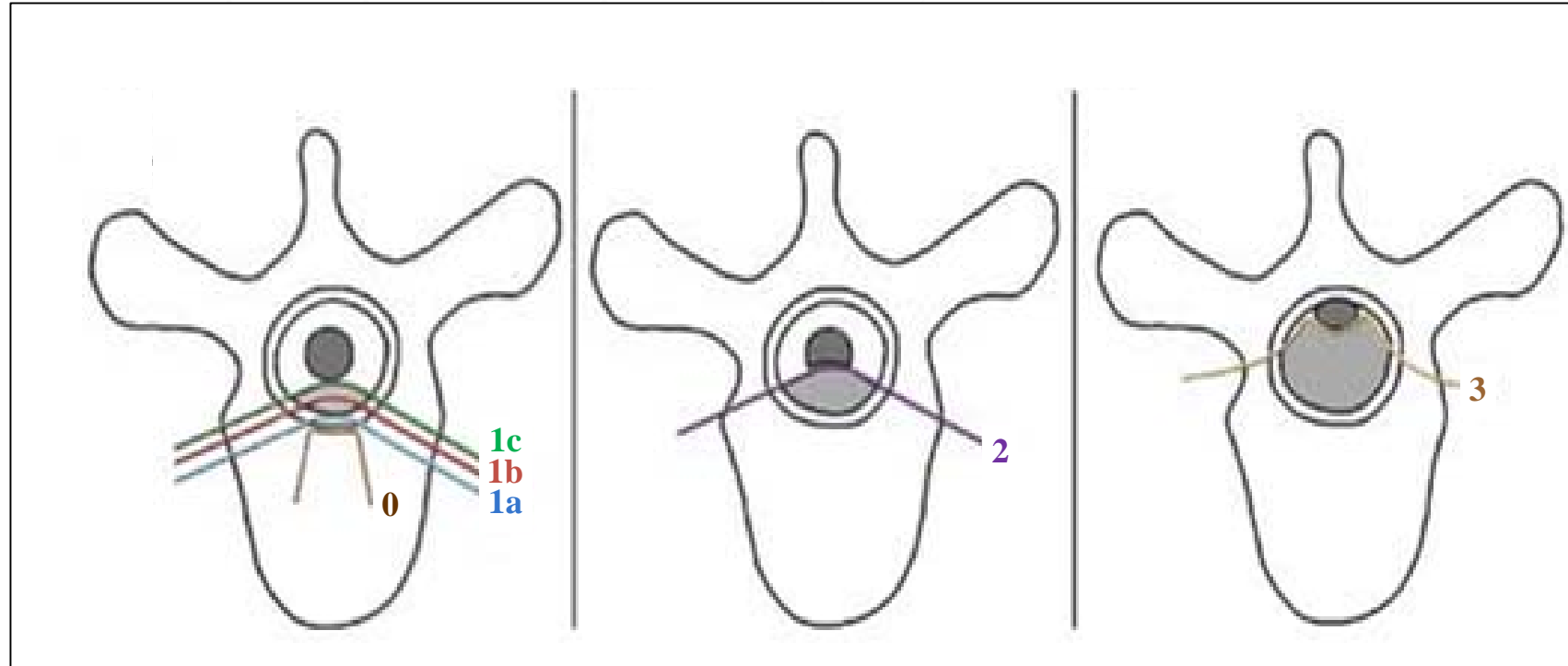
¹ Consider use of Frankel Classification to assist with patient's current status (see Appendix A)
² Use of steroids in undiagnosed lymphomas is not recommended
³ CT scan if not eligible for MRI
⁴ Consider use of ESCC Radiographic Classification for cord compression assessment (see Appendix B)
⁵ In instances where patient is already receiving chemotherapy the oncologist will advise on whether treatment should be continued/discontinued/delayed
⁶ Consider radiosensitivity of tumor

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APPENDIX A – Frankel Classification			
Grade	Status	Sensory Function below level of compression	Motor Function below Level of Compression
A	Paraplegia	No sensation	Complete paralysis (no function)
B	Sensory function only	Some sensation	Complete paralysis (no function)
C	Nonambulatory		Some motor function, but of no practical use to the patient
D	Ambulatory		Some motor function with some use to the patient
E	No neurologic signs or symptoms	Normal	Normal

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APPENDIX B – Epidural Spinal Cord Compression Scale (ESCC)



Schematic representation of the 6-point ESCC grading scale.

- Grade 0 Bone-only disease
- Grade 1a Epidural impingement, without deformation of thecal sac
- Grade 1b Deformation of thecal sac, without spinal cord abutment
- Grade 1c Deformation of thecal sac with spinal cord abutment, without cord compression
- Grade 2 Spinal cord compression, with cerebral spinal fluid (CSF) visible around the cord
- Grade 3 Spinal cord compression, no CSF visible around the cord

Reproduced with permission from Bilsky et al, 2010, J Neurosurg: Spine 13(3), 324-328

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DEVELOPMENT CREDITS

This practice consensus algorithm is based on majority expert opinion of the Spinal Cord Compression Work Group at the University of Texas MD Anderson Cancer Center. It was developed using a multidisciplinary approach that included input from the following medical, radiation and surgical oncologists.

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