VANDERBILT UNIVERSITY
MEDICAL CENTER
DIVISION OF ACUTE CARE SURGERY

Cervical Collar Clearance Protocol

Revision Team	Specialty
Tyler W. Barrett, MD, MSCI	Emergency Medicine
Christy Cherkesky, ACNP, APN	Spine Center
Bradley M. Dennis, MD	Trauma
F. Daniel Dunnavant, MD	Radiology
Bethany L. Evans, MSN, ACNP	Trauma
Jacob P. Schwarz, MD	Neurosurgery Spine
Jill R. Streams, MD	Trauma
Doug Wallace, MD, DTMH	Emergency Medicine

Oversight:
Trauma Program Operational Process Performance (10/22/2025)
Multidisciplinary Trauma Conference (10/22/2025)

Vanderbilt University Medical Center
Division of Acute Care Surgery

Last Revised: September 22, 2025

Definitions:

Hyperreflexia, defined by any of the following:

1. Positive Babinski signs
2. 2 beats of clonus
3. Positive Hoffman's reflex:
    - Upper motor neuron lesion from cord compression
    - Is elicited by flipping either the volar or dorsal surfaces of the middle finger & observing the reflex contraction of the thumb and index finger

NEXUS (National Emergency X-Radiography Utilization Study) Criteria, defined by any of the following:

1. Midline C-spine tenderness to palpation
2. Altered mental status
3. Intoxicated
4. Abnormal neurologic exam
5. Distracting injury

Abbreviations:

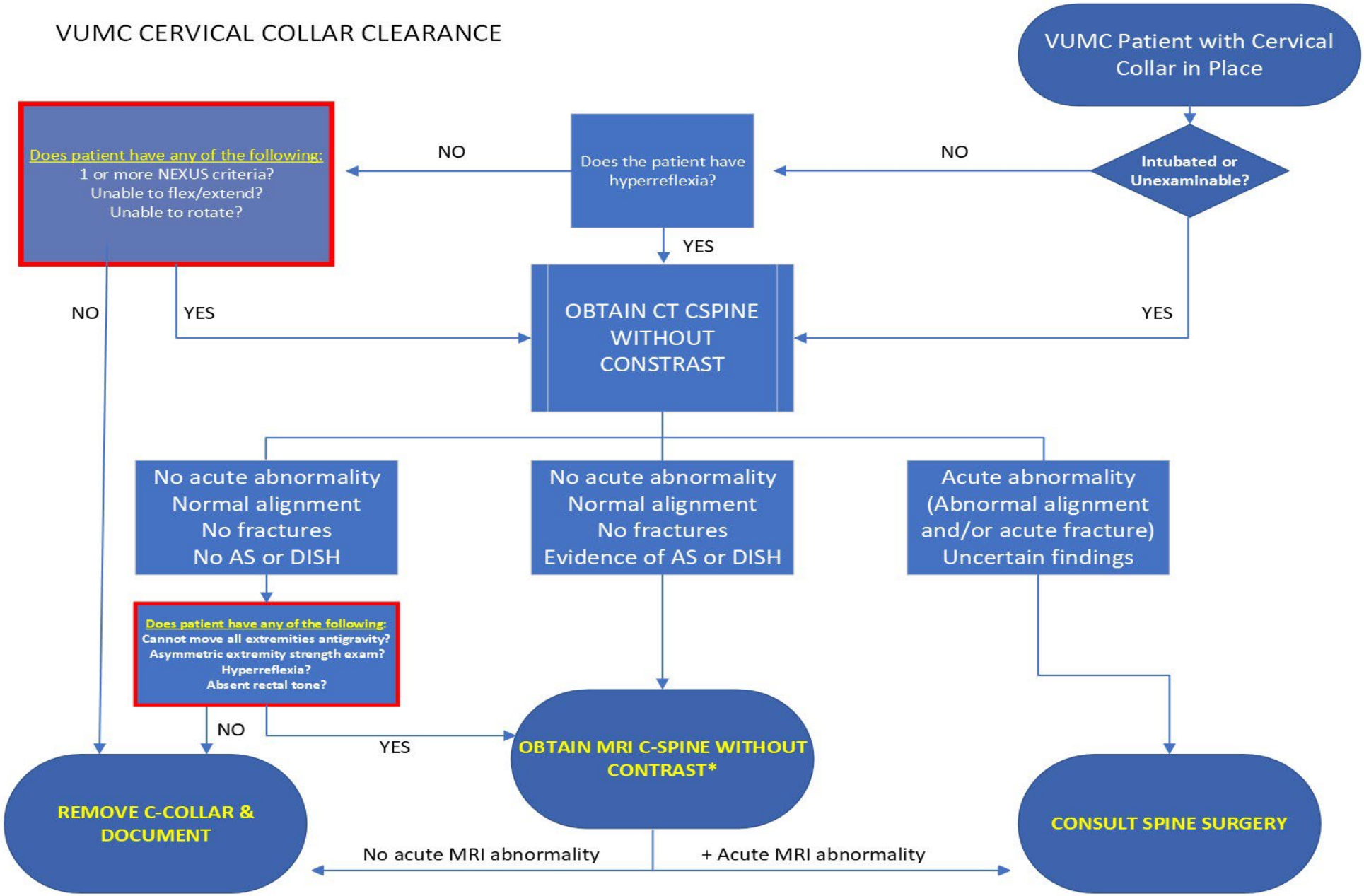
AS: Ankylosing Spondylitis
C-collar: Cervical Collar
C-spine: Cervical Spine
DISH: Diffuse idiopathic skeletal hyperostosis

C-Collar Clearance:

1. Cervical Collars to be cleared by PHYSICIANS (all level residents, fellows and attendings) and ADVANCED PRACTICE PROVIDERS only.
2. All specialties can follow flowchart below for C-Collar Clearance. Consult to trauma surgery or spine surgery is not needed for clearance.
3. Document cervical collar clearance in eStar

VANDERBILT UNIVERSITY
MEDICAL CENTER
DIVISION OF ACUTE CARE SURGERY

VUMC CERVICAL COLLAR CLEARANCE



*If unable to obtain MRI, obtain upright cervical spine XRs in collar

Trauma Surgery Clinical Exam for Cervical Collar Removal (after imaging)

Examine for the following:

1. All extremities able to move antigravity
2. Motor strength equal throughout extremities
3. No hyperreflexia on exam
4. No radicular pain or paresthesias

Key References:

1. Patel MB, Humble SS, Cullinane DC, Day MA, Jawa RS, Devin CJ, Delozier MS, Smith LM, Smith MA, Capella JM, Long AM, Cheng JS, Leath TC, Falck-Ytter Y, Haut ER, Como JJ. Cervical Spine Collar Clearance in the Adult Obtunded Trauma Patient: A Practice Management Guideline from the Eastern Association for the Surgery of Trauma. Journal of Trauma. 2015;78(2):430-441.

2. Badhiwala JH, Lai CK, Alhazzani W, et al. Cervical spine clearance in obtunded patients after blunt traumatic injury: a systematic review. Ann Intern Med. 2015;162(6):429–437.

3. Bush L, Brookshire R, Roche B, et. al. Evaluation of Cervical Spine Clearance by Computed Tomographic Scan Alone in Intoxicated Patient with Blunt Trauma. JAMA Surg. 2016;151(9):807-813.

4. Dion PM, Lapierre M, Said H, Tremblay S, Tariq K, Lamb T, English SW, Kingstone M, Stratton A, Boet S, Shorr R, Lampron J. Rethinking cervical spine clearance in obtunded trauma patients: An updated systematic review and meta-analysis. Injury. 2024 Mar;55(3):111308. doi: 10.1016/j.injury.2023.111308. Epub 2023 Dec 31. PMID: 38266326.