Cervical Collar Clearance Protocol

<table>
<thead>
<tr>
<th>Revision Team</th>
<th>Specialty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tyler W. Barrett, MD, MSCI</td>
<td>Emergency Medicine</td>
</tr>
<tr>
<td>Christy Cherkesky, ACNP, APN</td>
<td>Spine Center</td>
</tr>
<tr>
<td>Bradley M. Dennis, MD</td>
<td>Trauma</td>
</tr>
<tr>
<td>F. Daniel Dunnavant, MD</td>
<td>Radiology</td>
</tr>
<tr>
<td>Bethany L. Evans, MSN, ACNP</td>
<td>Trauma</td>
</tr>
<tr>
<td>Jacob P. Schwarz, MD</td>
<td>Neurosurgery Spine</td>
</tr>
<tr>
<td>Jill R. Streams, MD</td>
<td>Trauma</td>
</tr>
</tbody>
</table>

Oversight:
Trauma Program Operational Process Performance (10/25/2023)
Multidisciplinary Trauma Conference (10/25/2023)

Vanderbilt University Medical Center
Division of Acute Care Surgery

Last Revised: October 19, 2023
**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
VUMC CERVICAL COLLAR CLEARANCE

Does patient have any of the following:
1 or more NEXUS criteria? Unable to flex/extend? Unable to rotate?

NO

Does the patient have hyperreflexia?

NO

VUMC Patient with Cervical Collar In Place

Intubated or Unexaminable?

YES

NO

OBTAIN CT CSPINE WITHOUT CONTRAST

OBTAIN MRI C-SPINE WITHOUT CONTRAST*

No acute abnormality
Normal alignment
No fractures
No AS or DISH

No acute abnormality
Normal alignment
No fractures
Evidence of AS or DISH

Acute abnormality
(Abnormal alignment and/or acute fracture)
Uncertain findings

Does patient have any of the following:
Cannot move all extremities antigravity?
Asymmetric extremity strength exam?
Hyperreflexia?
Absent rectal tone?

NO

NO

REMOVE C-COLLAR & DOCUMENT

CONSULT SPINE SURGERY

NO acute MRI abnormality + Acute MRI abnormality

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

