



Origination 03/2023
Last 05/2025
Approved
Effective 05/2025
Last Revised 05/2025
Next Review 05/2028

Contact Stephanie Spain:
Trauma Prgm
Mgr Adult
Area Trauma Surgical
Critical Care
Applicability Erlanger Health -
Baroness

Clearance of the Cervical Spine in Obtunded/Intubated Patients or Patients with Neck Pain Practice Management Guideline

1. Guideline Statement

To ensure proper procedure is used clearing the cervical spine in obtunded patients and patients with neck pain.

2. Scope

All Radiology Personnel/Trauma Services

3. Definitions

Cervical collars place blunt trauma patients at risk for skin breakdown and decubitus ulcers. Timely removal of collars based on peer reviewed literature will facilitate patient care and satisfaction.

4. Indications:

Flexion/Extension C-spine films are indicated for patients with normal CTs of the cervical spine and neck pain on physical exam or range of motion exercise.

5. Procedure

- | |
|--|
| 1. Obtunded or intubated patients: with normal boney cervical CT scans with 3mm cuts or less and coronal and sagittal reconstructions can have their cervical collars removed if the official |
|--|

radiology report demonstrates no evidence of acute injury. All Erlanger cervical imaging studies meet the necessary criteria. Studies from outside facilities need to be reviewed for cut thickness and reformatting. If the necessary criteria are not met, a repeat study should be ordered.

2. **Patients with cervical pain:** Patients that have pain with range of motion and normal cervical spine CT should undergo flexion extension imaging (see Policy [Trauma Spine Assessment and Cord Injury PMG](#)).

When an order is received in the Radiology Department for flexion-extension, Radiology will verify C-spine CT has been performed and interpreted. If report is normal, then appropriate staff will be coordinated to perform the study. If abnormal, approval from Radiologist will be ascertained.

Assistance may be obtained from the Critical Care Nurse Clinician (Redshirt) on duty via pager # 1891 or extension 6742.

Patient Mental Status

Patient should be oriented to person and place, easily aroused by voice and alert, and able to sit up. If not, then notify surgery chief resident on call; patient may need to return to floor without undergoing procedure. An MRI of the cervical spine without contrast (trauma protocol) should be considered.

Routine Procedure

- While patient is sitting upright, remove c-collar.
- Obtain neutral lateral image.
- Have patient actively flex head forward toward chest, as comfortably as he or she can.
- Obtain a lateral image at maximal flexion.
- Have patient return head to neutral lateral position and then extend head backwards, as comfortably can. Obtain lateral extension image.
- When study is complete, reapply c-collar and send patient back to room.

Pain:

At any point in procedure, if patient develops increasing pain during positioning, stabilize head and obtain an image in that position, reapply c-collar and performing nurse will notify floor nurse.

References:

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 Obtunded Adult Blunt Trauma Patient. J Trauma. 78(2):430-441, February 2015.

Mauldin JM, Maxwell RA, King SM, Phlegar RF, Gallagher MR, Barker DE, Burns RP. Prospective evaluation of a critical care pathway for clearance of the cervical spine using the bolster and active range of motion

flexion/extension technique. J Trauma 2006 Sep;61(3):679-85.

Approval Signatures

Step Description	Approver	Date
VP Approval	Jessica Holladay: VP & ACNO Surg & Trauma Svcs	05/2025
Trauma Services Committee Approval	Stephanie Spain: Trauma Prgm Mgr Adult	05/2025
	Stephanie Spain: Trauma Prgm Mgr Adult	05/2025

Applicability

Erlanger Health - Baroness

COPY