

ENVIRONMENT

Physical Space: Room with 5-6 chairs, cart/table for mannequins, writing board with marker

Required Equipment:

- » Infant and child padded c-collars with included paperwork for sizing. (small, medium and large)
- » Two sizes of EMS extrication collars
- » Towels/washcloths, Padding blankets
- » Child and infant mannequin
- » Suction equipment
- » Slide board

INTRODUCTIONS (NO MORE THAN 5 MINUTES)

Introduce yourself to the group. If this is second rotation do a brief introduction of the participants, so the instructor knows who is in the group.

Learning Objectives:

- » Contrast c-spine precautions and full spinal precautions
- » Describe the steps required to safely log roll a patient in full spine precautions.
- » Summarize the assessment before and after completing a collar change or patient movement

ROLES AND RESPONSIBILITIES

As a group, the students will actively work through the case scenarios. Students are expected to apply the knowledge gained from the interactive lectures and demonstrate pediatric assessment and management as outlined in the objectives. Students will also have the opportunity to demonstrate critical thinking skills in patient management. Effective communication and teamwork are essential. The instructor will serve as facilitator and assist the participants with skills while maintaining the focus on the pediatric trauma patient.

INTRODUCE SCENARIO:

You are preparing to receive a patient in transfer from an outside hospital (OSH). Jamesy is a 14-year-old male with no significant past medical history who presented to ED after an ATV crash. Patient was unhelmeted when he lost control of the ATV and struck a tree. Patient states he didn't lose consciousness. Other injuries included lacerations to his posterior auricle and scalp with abdomen tender to palpation in right upper quadrant. After a brief trauma activation evaluation in your hospital ED, he is being transferred to your unit report of patient being anxious and tearful.

How will you prepare for this patient?

- » Make sure suction is ready and working – kids with concussions often vomit and child in spine precautions is an aspiration risk
- » Have parents stay within sight of vision of child so child does not attempt to move to see them

What is the difference between c-spine precautions and full spine precautions?

- » C-spine patient in c-collar only, no pillow, can have head of bed elevated
- » Full spine patient in c-collar and limited movement of entire spine – patient to lay flat and stay straight

Prompt - do we anticipate c-spine precautions or full spinal precautions?

When you do your assessment on the child after handoff you note that the ED c-collar or extrication collar is still on the patient. You recognize the need to change the collar.

Why is this step necessary?

- » Padded collars are designed to be worn for longer periods of time, have more padding, and less chance of skin breakdown
- » Compare extrication and padded collar to explain decubitus risk

What preparation is necessary to facilitate this collar change?

- » Gather all equipment before you start the procedure.
 - Appropriately sized collar (will need to include information regarding sizing-measure from lower jaw to clavicles)

- Adequate number of people to assist – to simply change collar 2 is adequate but if you are to log roll will need minimum of 4.
- » Explain the procedure to the patient and family using age-appropriate language.
- » Assess neurologic status prior to beginning procedure – what does this entail
- » What will your documentation of this procedure include?

Procedural steps for changing c-collar

- » Ready appropriately sized collar
- » Position the patient with arms at sides, shoulders down and head centrally aligned.
- » The nurse at the head of the patient assumes in line c-spine stabilization. How is this best accomplished in children?
- » Another nurse removes the anterior portion of the collar. The nurse at the head explains each step along with way. Next the posterior portion is removed.
- » The nurse at the head maintains control of the head. Slide the posterior portion of the new collar behind the patient's neck and center it. Next apply the anterior portion of the collar.
- » While holding the anterior portion of the collar of the collar securely curl the ends around the patient's neck.
- » Apply Velcro straps one side at a time.
- » Assess the patient to ensure a proper fit
- » Reassess neurologic status and compare to baseline
- » Document your procedure

How do you prepare for log rolling?

- » Gather all necessary equipment- linens, bath equipment, bedpan etc.
- » Gather a safe appropriate team
- » Explain the procedure to the patient and the family
- » Assess neurologic status prior to beginning the procedure

INSTRUCTOR PROMPT:

There are other standardized trauma nursing courses that advocate for a 6 person lift as opposed to log rolling. ATLS however still uses the log roll in their curriculum so we will use that here. It is important to point this out to the participants and advise them to be familiar with is used in their practice at their facility.

Procedural steps for log rolling patient

- » The person that assumes in-line stabilization becomes the leader and will direct all further patient and team movement.
- » Will need a total of 4 people to safely complete the task – 3 to roll and a 4th to do whatever task is being accomplished.
- » Two people, one the side of the patient. One person puts hands on shoulder and hip. The second person puts their hands on the hip on knee with hands crossed with first person.
- » Tell the patient to give themselves a big hug if age appropriate. If the child is younger or not able to follow directions, cross the patient's arms for them.
- » The person at the head counts and directs the team to roll on 3, tasks are done and then again counts to direct the team to roll the patient back when appropriate.
- » Position the caregiver to be in the line of sight of child when rolled.
- » Assess neurologic and motor function after moving the patient
- » Document procedure

INSTRUCTOR NOTES:

This skill station is designed to be participant driven and not taught directly by the instructor. We want to gauge their level of knowledge and ability to process information not simply recite from rote memory. The first part of the station will be a group activity based upon a case scenario. Based upon the scenario there are prompts for questions for the group. Then again based upon the scenario there will be hands on activity for all to participate in. Key points to ensure safe and appropriate actions are provided. Have several of the group demo changing out the collar itself and have the other half of the group demo logrolling. Last do a short debrief with the group about how they feel about these skills, etc.