**CLINICAL DEMONSTRATION**

**SCENARIO # 1 A)**

**Mode of arrival:** ambulance with backboard and collar

**Mechanism of Injury:** front seat passenger wearing seatbelt
- Car travelling 50km/hr
- T-bone collision on driver's side
- Pt ambulatory at scene

**Presenting complaint:** neck pain? **NO**
- right wrist pain
- right knee abrasion

**QUESTIONS AND ANSWERS:**

**Age:** 40  
**Sex:** F

**Neck pain:** **NO**

**Alert and orientated X 3**

**VS stables**

**Any exclusion criteria?**  **NO**

**HIGH RISK:**
- age >65  **NO**
- Dangerous mechanism? **NO**
- Paresthesias in extremities?  **NO**

**LOW RISK:**
- simple rear ended MVC  **NO**
- sitting position in ED  **NO**
- ambulatory at any time  **YES**
- delayed onset of neck pain  **NO**
- absence of midline c-spine tenderness  **YES**

**NECK ROTATION:**
- able to rotate neck 45° left and right  **YES**

**PLAN:**
- replace collar securely since validation study
- MD to assess

*state immobilization would not be necessary for this patient*
**CLINICAL DEMONSTRATION**

**SCENARIO # 1 B)**

**Mode of arrival:** ambulance with backboard and collar  
**Mechanism of Injury:** front seat passenger wearing seatbelt  
- Car travelling 50km/hr  
- T-bone collision on driver’s side  
- Pt ambulatory at scene

**Presenting complaint:** neck pain  
Right wrist pain  
Right knee abrasion

**QUESTIONS AND ANSWERS:**

- **Age:** 40  
- **Sex:** F  
- **Neck pain:** YES Midline c-spine tenderness  
- Alert and orientated X 3  
- **VS stables**  
- **Any exclusion criteria?** NO

**HIGH RISK:**  
- **age >65** NO  
- Dangerous mechanism? NO  
- Paresthesias in extremities? NO

**LOW RISK:**  
- simple rear ended MVC NO  
- sitting position in ED NO  
- ambulatory at any time YES  
- delayed onset of neck pain NO  
- absence of midline c-spine tenderness NO

**NECK ROTATION:** able to rotate neck 45° left and right YES

**PLAN:** replace collar securely since validation study  
MD to assess  *state immobilization would not be necessary for this patient
CLINICAL DEMONSTRATION
SCENARIO # 1 C)

Age: 40     Sex:  F

Mode of arrival: ambulance with backboard and collar

Mechanism of Injury: front seat passenger wearing seatbelt
Car travelling 120km/hr
T-bone collision on driver’s side
Pt ambulatory at scene

Presenting complaint: neck pain
right wrist pain
right knee abrasion

QUESTIONS AND ANSWERS:
Age: 40     Sex:  F
Neck pain:  YES Midline c-spine tenderness
Alert and orientated X 3
VS stables
Any exclusion criteria?   NO

HIGH RISK:  age >65   NO
Dangerous mechanism?  YES (speed > 100km/hr)
Paresthesias in extremities? NO

STOP THE RULE HERE, THIS PATIENT HAS A DANGEROUS MECHANISM

LOW RISK: simple rear ended MVC  NO
sitting position in ED   NO
ambulatory at any time  YES
delayed onset of neck pain  NO
absence of midline c-spine tenderness  NO

NECK ROTATION: NO BECAUSE OF DANGEROUS MECHANISM

PLAN: MD to assess
CLINICAL DEMONSTRATION
SCENARIO # 2 A)

Age: 37      Sex: F

**Arrival mode:** Ambulance with backboard and collar
**Mechanism of Injury:** Fall from 2nd step of ladder while decorating Christmas tree
Was walking in the house when ambulance arrived
admits to drinking 6 beer

**Presenting complaint:** Right hip pain
small laceration to right forearm
GCS ? must be determined (alert, orientated x 3)

**QUESTIONS AND ANSWERS:**
Age: 37      Sex: F
Neck pain: NO
Alert and orientated X 3
VS stables
Any exclusion criteria? NO

**HIGH RISK:** >65yrs NO
Dangerous mechanism NO
Paresthesias in extremities NO

**LOW RISK:**
  simple rear ended MVC NO
  sitting position in ED NO
  ambulatory at any time YES
  delayed onset of neck pain NO
  absence of midline c-spine tenderness YES

**NECK ROTATION:**
ABLE TO ACTIVELY ROTATE NECK 45° left and right YES

**PLAN:** keep immobilized on backboard and collar
CLINICAL DEMONSTRATION
SCENARIO # 2 B)

Age: 37  Sex: F

Mode of arrival: Ambulance with backboard and collar

Mechanism of Injury: Fall from 2nd step of ladder while decorating Christmas tree

Was walking in the house when ambulance arrived

Admits to drinking 6 beer

Presenting complaint: c/o neck pain YES (midline c-spine tenderness)
right hip pain
small laceration to right forearm
GCS ? confused with time and place (alert, orientated x 2)

QUESTIONS AND ANSWERS:

Age: 37  Sex: F

Neck pain: YES

Alert and orientated X 2
VS stables

Any exclusion criteria?  YES

PATIENT NOT ORIENTATED X3, THEREFORE STOP THE RULE NOW

HIGH RISK: >65yrs NO

Dangerous mechanism NO
Paresthesias in extremities NO

LOW RISK:
simple rear ended MVC NO
sitting position in ED NO
ambulatory at any time YES
delayed onset of neck pain NO
absence of midline c-spine tenderness NO

NECK ROTATION:  NOT TO BE DONE

PLAN:  keep immobilized on backboard and collar
CLINICAL DEMONSTRATION
SCENARIO # 2 C)

Age: 37  
Sex: F

Mode of arrival: Ambulance with backboard and collar

Mechanism of Injury: Fall from 2nd step of ladder while decorating Christmas tree
   Was walking in the house when ambulance arrived
   admits to drinking 6 beer

Presenting complaint:  c/o neck pain (where)  YES (midline c-spine tenderness)
   right hip pain
   small laceration to right forearm
   GCS must be determined (alert, orientated x3)

QUESTIONS AND ANSWERS:
Age: 37  Sex: F
neck pain: YES (midline c-spine tenderness)
Alert and orientated X 3
VS stables
Any exclusion criteria?  NO

HIGH RISK:  ≥65yrs  NO
   Dangerous mechanism  NO
   Paresthesias in extremities  NO

LOW RISK:  simple rear ended MVC  NO
   sitting position in ED  NO
   ambulatory at any time  YES
   delayed onset of neck pain  NO
   absence of midline c-spine tenderness  NO

NECK ROTATION:  
   ABLE TO ACTIVELY ROTATE NECK  45° left and right  YES

PLAN:  keep immobilized on backboard and collar