PATIENT ASSESSMENT

I

Objectives

- 3-1 identify step-by-step procedures for prehospital/field triage and why and when scene size-up and the initial assessment must be done with at least 80% accuracy.

Objectives

- The Scene Size-up
- The Initial Assessment

The Scene Size-up

The Scene Size-up

- An assessment of the scene and surroundings that will provide valuable information to the EMT

The Scene Size-up

- BSI Review
  - Eye Protection
  - Gloves
  - Gown
  - Mask

The Scene Size-up

- Scene safety
  - Assessment to assure the well-being of the EMT-B
  - Is it safe to approach the patient

Safety

- Crash and rescue scenes
  - Greatest and most common hazard for EMT-B's is traffic surrounding auto accidents
- Toxic Substances
- Unstable surfaces

Scene Size-up

- Crime scenes
  - Signs of danger
    - »Fighting/loud noises
    - »Weapons
    - »Alcohol/drug use
    - »Unusual silence
    - »Knowledge of prior violence

Crime Scenes

- If danger exists
  - React
  - Run
  - Get rid of equipment
  - Cover and conceal
  - Notify police
  - Return only after scene is safe

The Scene Size-up

- Always perform your own scene size-up
  - Scan for dangers
  - Infection control concerns
  - Hazardous materials

The Scene Size-up

- Is not confined to the first part of the assessment
  - Continues throughout the entire call

The Scene Size-up – Trauma Patient

- Mechanism of Injury (MOI)
  - Forces that may have caused the injury
  - Determine from patient, bystanders, scene

The Scene Size-up – Trauma Patient

- Mechanism of Injury (MOI)
  - Knowing MOI, will allow the EMT-B to predict various injury patterns

Mechanism of Injury

- Certain injuries are common to particular situations
  - Falls/MVA
    - »Bones
    - »Joints

Mechanism of Injury

- Certain injuries are common to particular situations
  - Fires/Explosions
    - »Burns
  - Gunshots
    - »Penetrating soft tissue injuries

Types of Motor Vehicle Collisions

- Head-on
  - Great potential of injury to all body parts
    - »Head
    - »Chest
    - »Legs and knees

Head-On

Types of Motor Vehicle Collisions

- Rear-end
  - Neck injuries

Types of Motor Vehicle Collisions

- Side-impact
  - Body pushed laterally
  - Head moves in opposite direction
  - Head and neck injuries common

Side-Impact

Types of Motor Vehicle Collisions

- Rollover
  - Potentially most serious
  - Frequently causes ejection
  - Expect serious injuries

Rollover

Types of Motor Vehicle Collisions

- Rotational impact
  - Involves cars that are struck and then spin
  - Causes multiple injury patterns

Rotational Impact

MOI – Trauma Patient

- Falls
  - Factors to consider
    - »Height
    - »Surface
    - »Part of the patient that hit the ground
    - »Anything that interrupts fall

Scene Size-up

- Determine number of patients
  - If more than responding unit can handle
    - »Initiate multiple-casualty plan
    - »Obtain help

Scene Size-up

- Determine number of patients
  - If responding unit can handle situation
    - »Consider spinal precautions
    - »Begin Initial Assessment

Scene Size-up – Medical Patient

- Nature of illness
  - What is wrong with the patient
    - » Patient
      - Primary source of information
    - » Family/bystanders
    - » Scene

Scene Size-up

- Determine number of patients
  - If more than responding unit can handle
    - »Initiate multiple-casualty plan
    - »Obtain help

Scene Size-up

- Determine number of patients
  - If responding unit can handle situation
    - »Consider spinal precautions
    - »Begin Initial Assessment

The Initial Assessment

- Purpose
  - Find and correct life threatening conditions
  - Determine priority for treatment and transport

General Impression

- Always the first element in the total assessment of the patient
  - Based on the immediate assessment of the environment
    - »Gives clues about the patient
    - »Can sometimes tell you what happened
    - »Can be extremely useful

General Impression

- To form a general impression
  - Look
  - Listen
  - Smell
  - Clinical judgment
  - Overall appearance of the patient

Assess Mental Status

- Purpose
  - To determine patient's level of consciousness
  - Begin by obtaining consent
    - »Name
    - »Level of training
    - »That you are there to help

Assess Mental Status

- Purpose
  - –Levels of mental status
    - »A – Alert
      - Assess to person, place, time
    - »V – Verbal
    - »P – Painful
    - »U - Unresponsive

Assess Airway

- Responsive patient
  - Is patient talking?
- Unresponsive patient
  - Open airway
    - »Known medical patients
    - »Trauma patients

Assess Breathing

- Expose chest
  - Treat any life threatening injuries
- Assess breathing
  - Rate and quality 30 X 2

Assess Breathing

- Oxygen therapy
  - Look at
    - »Rate
    - »Breathing characteristics
    - »Overall impression of the patient

Oxygen Therapy

- Alert patient and respirations are greater than 24/min
  - NRB at 15 LPM
- Decreased LOC and breathing less than 8 or greater than 24/min
  - BVM at 15 LPM

Assess Circulation

- Assess pulse
  - Infants
  - Adults/children
- Assess for profuse bleeding
  - Treat PRN

Assess Circulation

- Assess skin
  - Color
  - Condition
  - Temperature
- Capillary refill

Identify Priority Patients

Considerations

- Poor general impression
- Unresponsive
- Responsive – not following commands

Identify Priority Patients

Considerations

- Dyspnea
- Shock
- Complicated childbirth

Identify Priority Patients

Considerations

- Chest pain with BP less than 100 systolic
- Uncontrolled bleeding
- Severe pain

Review

- 3-1 identify step-by-step procedures for prehospital/field triage and why and when scene size-up and the initial assessment must be done with at least 80% accuracy.

Review

- The Scene Size-up
- The Initial Assessment

PATIENT ASSESSEMENT II

Objectives

3-2.1 Identify why and when the focused history and physical exam for the trauma , medical and ongoing assessment must be done with at least 80% accuracy.

Objectives

- Trauma Patient
- Detailed Physical Exam
- Medical Patient
- Ongoing Assessment

Trauma Patient

- Reconsideration of Mechanism of Injury
  - Because MOI is so important in determining your next steps you should reconsider it now

Significant MOI's

- Ejection from vehicle
- Death in same compartment
- Falls
  - 20 feet or 3 times patient's height

Significant MOI's

- Roll-over of vehicle
- High speed collision
- Vehicle-pedestrian collision
- Motorcycle crash

Significant MOI's

- Unresponsive or altered mental status
- Penetration injuries

“Hidden Injuries”

- Seatbelts
  - Don’t assume there are no injuries because they wore a seatbelt

"Hidden Injuries"

- Airbags
  - Patient can still hit steering wheel
  - Lift airbag and look after removing patient

“Hidden Injuries”

Significant MOI's

- Infant/child considerations
  - Falls
    - »Greater than 10 feet
  - Bicycle collisions
  - Vehicle collisions

Rapid Trauma Assessment

- Purpose
  - To rapidly assess each body part to determine if any life threatening condition exists that was missed during the initial assessment

Rapid Trauma Assessment

- Patient's with a significant MOI need a RTA

Rapid Trauma Assessment

- Continue spinal stabilization
- Consider advanced life support

Rapid Trauma Assessment

- Reconsider transport decision
- Assess mental status

Rapid Trauma Assessment

- Assess by
  - Inspection
  - Palpation
  - Auscultation

DCAP-BTLS

D – Deformities

C – Contusions

A – Abrasions

P – Punctures/ Penetrations

B – Burns

T – Tenderness

L – Lacerations

S – Swelling

DCAP-BTLS

- Deformity
  - Altered appearance
- Contusions
  - Bruises
- Abrasions
  - Most common

DCAP-BTLS

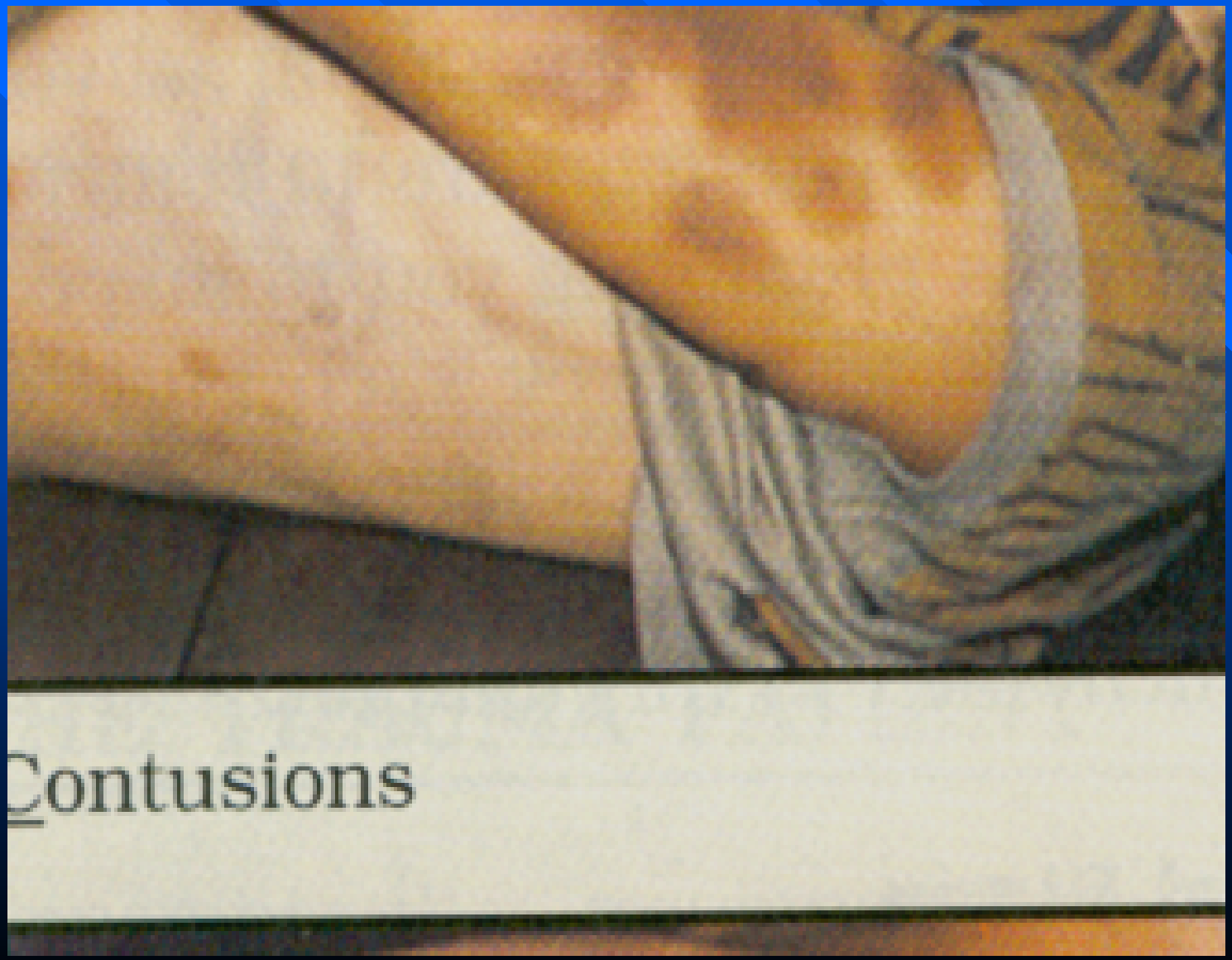
- Punctures/Penetrations
  - Holes
- Burns
- Tenderness
  - Pain upon Palpation

DCAP-BTLS

- Lacerations
  - Cut/open wound
  - May have significant blood loss Swelling
- Swelling
  - Very common with capillary bleeding under the skin

Deformity

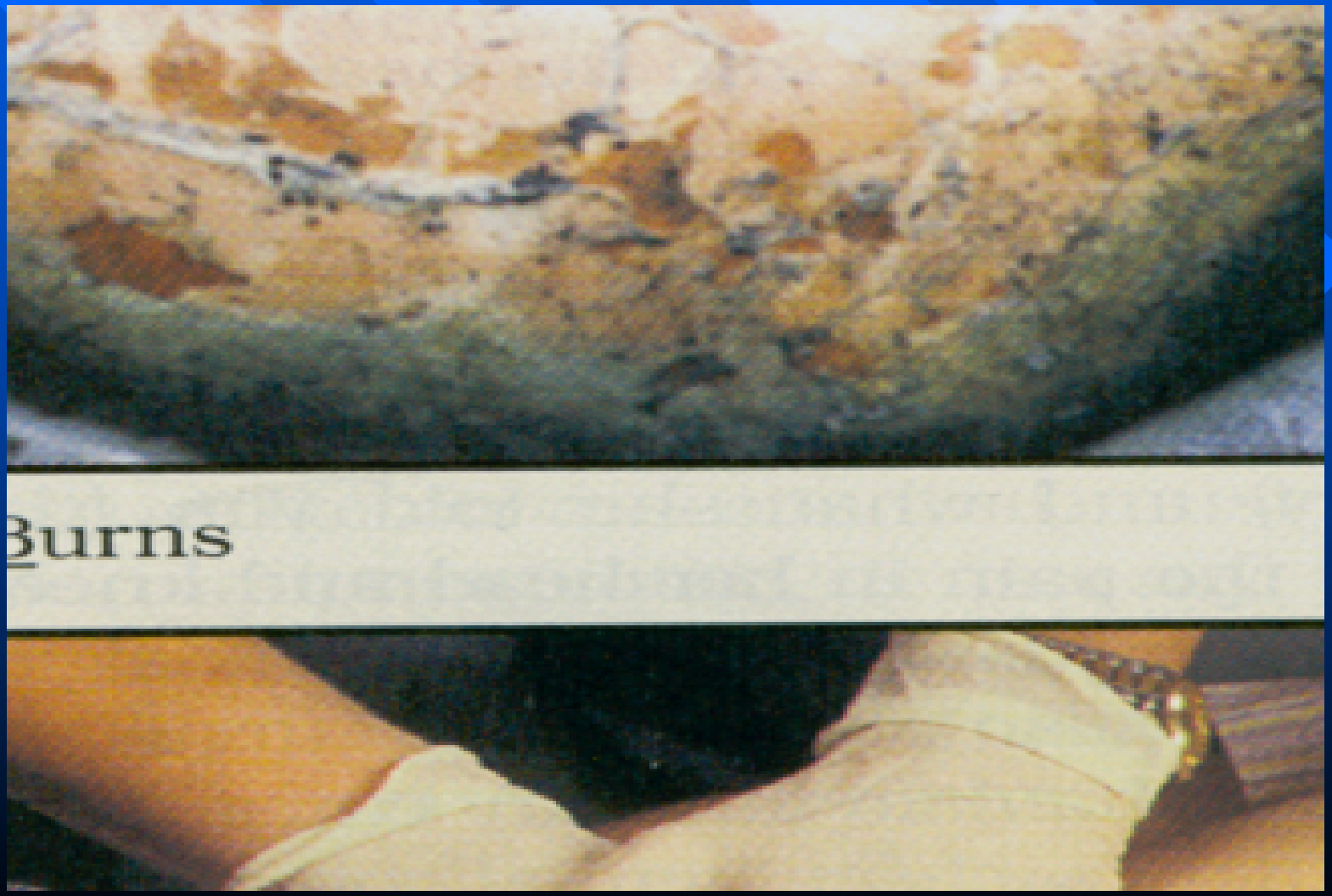
Contusions



Abrasions

Punctures/Penetrations

Burns



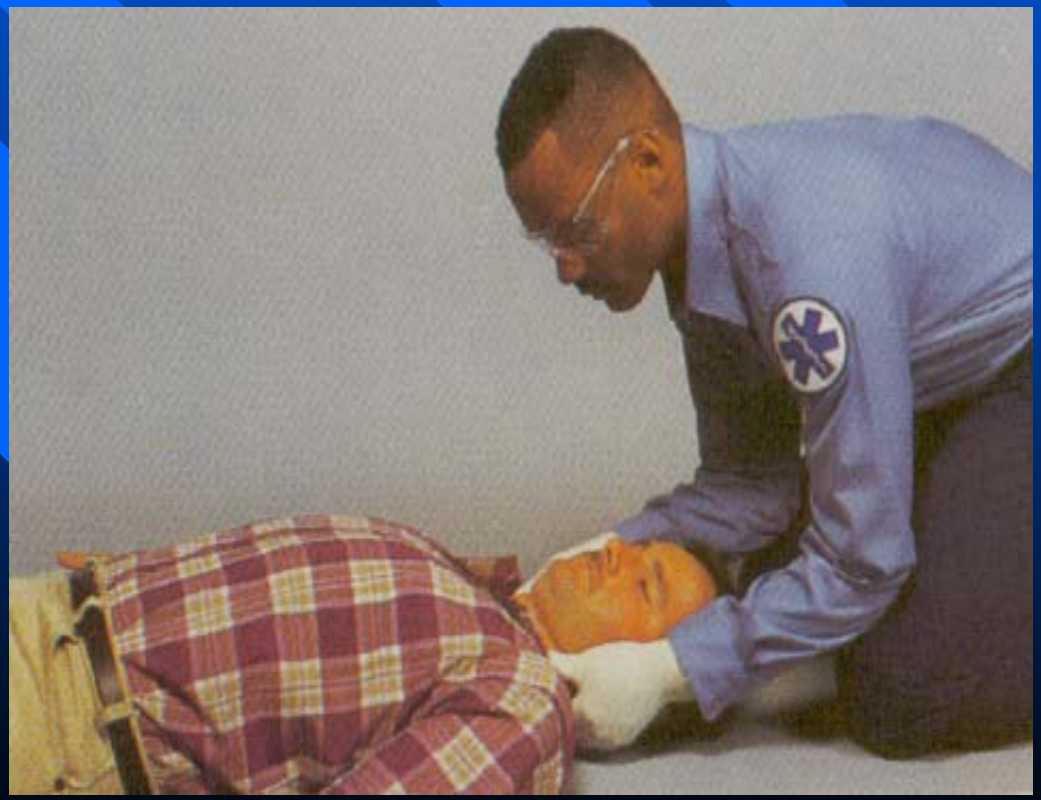
Tenderness

Lacerations

Swelling

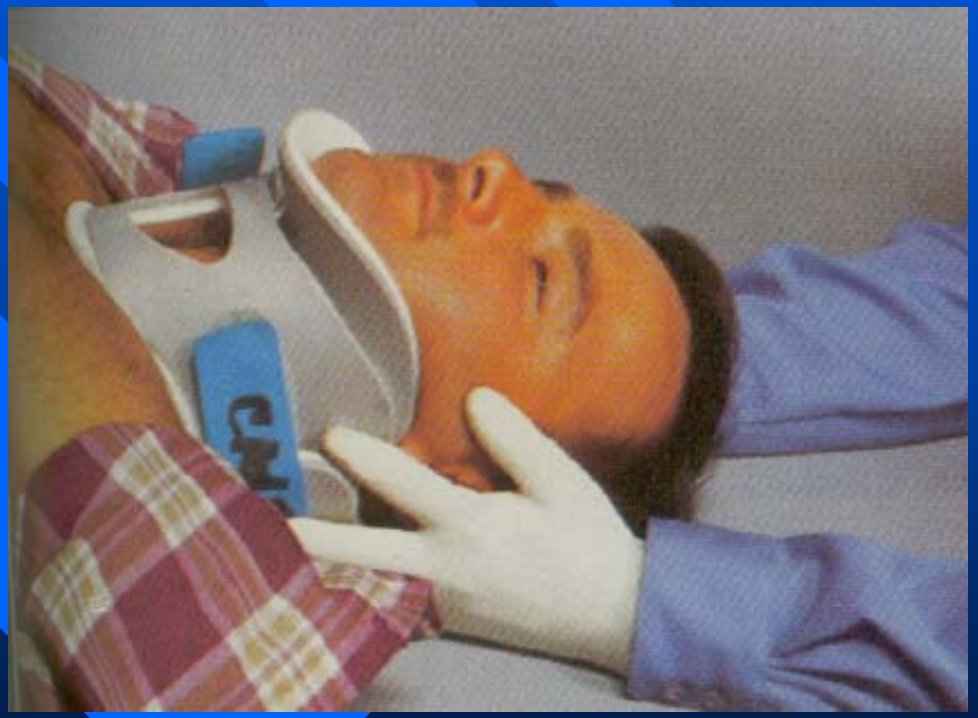
Head

- DCAP-BTLS
- Crepitation



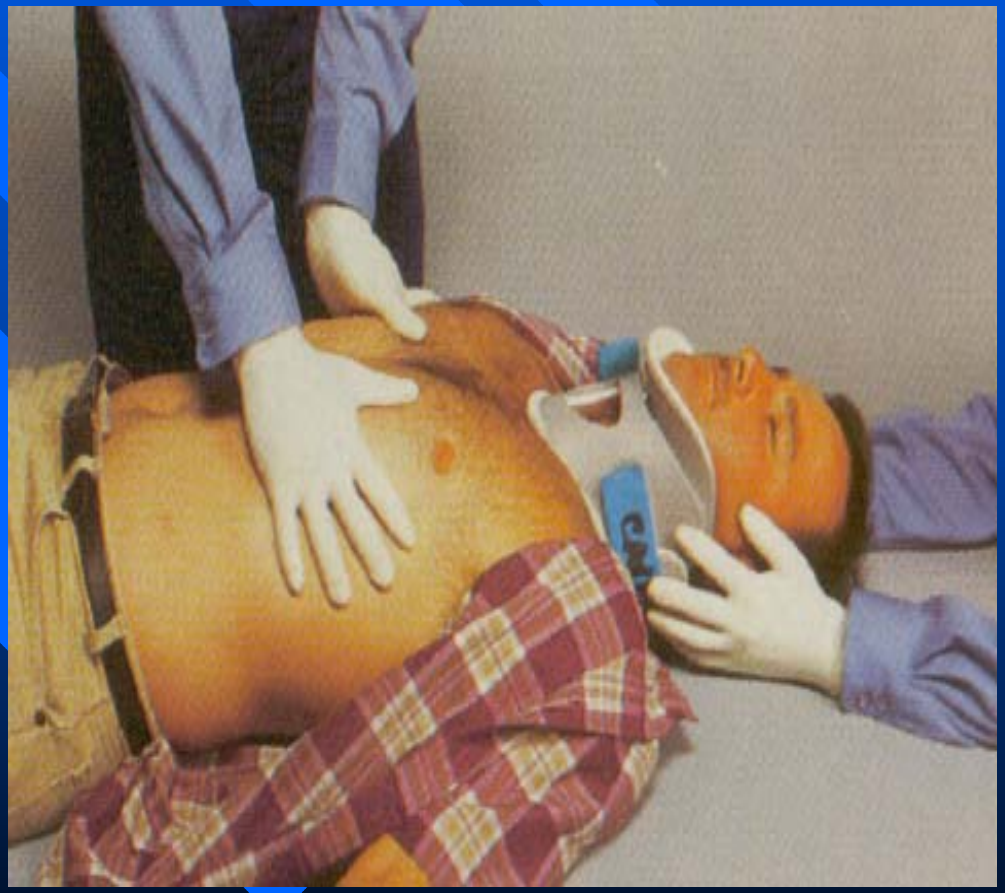
Neck

- DCAP-BTLS
- Crepitation
- JVD



Chest

- DCAP-BTLS
- Crepitation
- Breath sounds



Abdomen

- DCAP-BTLS
- Firm
- Soft
- Distended
- Pulsating masses

Pelvis

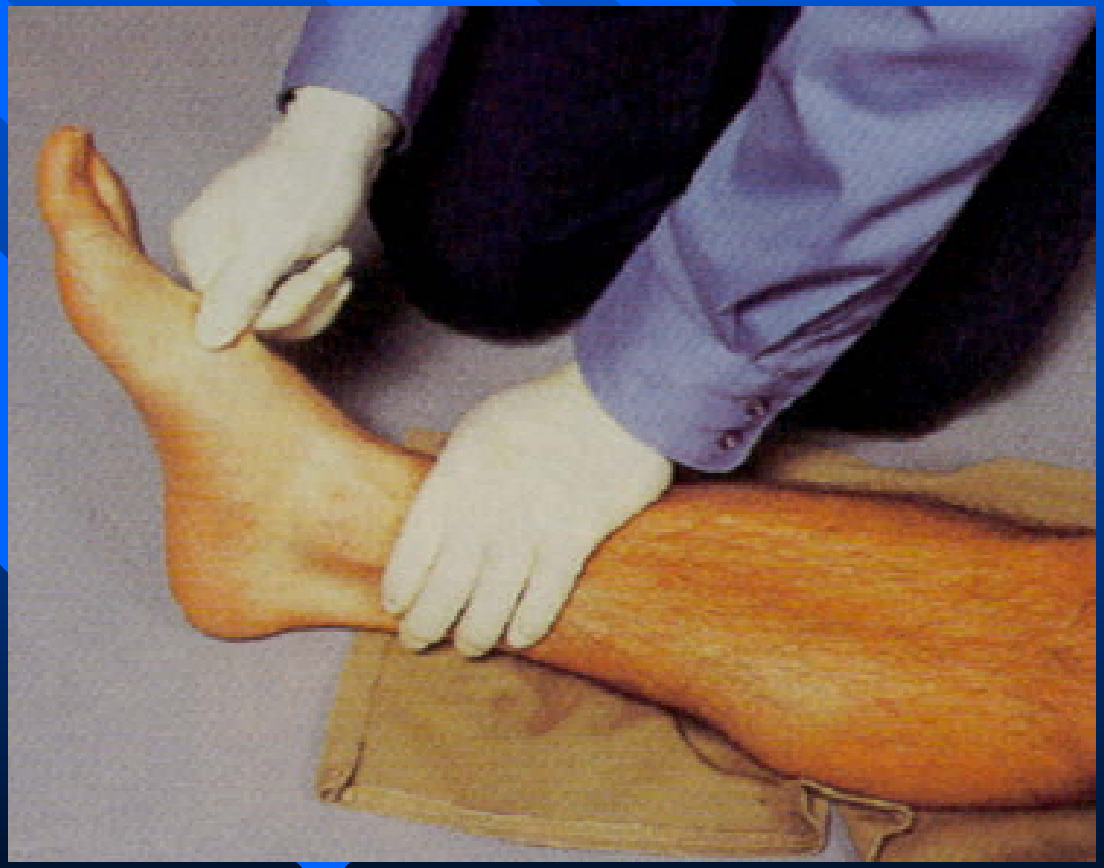
- DCAP-BTLS
- Crepitus
- Compress iliac crests

Genitalia

- DCAP-BTLS
- Priapism

Extremities

- DCAP-BTLS
- Crepitation
- Distal pulses
- Sensation
- Motor function



Posterior

- DCAP-BTLS
- Crepitation

Focused History and Physical Exam

If significant mechanism of injury

- Perform RTA
- Assess baseline vital signs

Focused History and Physical Exam

If significant mechanism of injury

- Obtain SAMPLE history
- Perform interventions and transport

Focused History and Physical Exam

- No significant mechanism of injury
  - Reconsider mechanism
  - Perform focused history & physical exam

Focused History and Physical Exam

- No significant mechanism of injury
  - Assess baseline vital signs
  - Obtain SAMPLE history
  - Perform interventions and transport

Focused History and Physical Exam

- General principles
  - Tell patient what you are doing
  - Expose any injured area before examining

Focused History and Physical Exam

- General principles
  - Maintain eye contact
  - Assume spinal injury

Detailed Physical Exam

- Purpose
  - Gather additional information about the patients injuries and conditions while en route to the hospital

Detailed Physical Exam

- Performed on
  - Most often on trauma patients with a significant MOI

Detailed Physical Exam

- Before you begin, repeat the initial assessment
  - General impression
  - Mental status
  - ABC's

Detailed Physical Exam

- Includes all areas of the RTA
- Also includes a more detailed examination of the
  - Scalp
  - Face
  - Ears
  - Eyes
  - Nose
  - Mouth

Detailed Physical Exam

- Scalp/cranium
  - DCAP-BTLS
  - Crepitation
- Face
  - DCAP-BTLS

Scalp/Face

Detailed Physical Exam

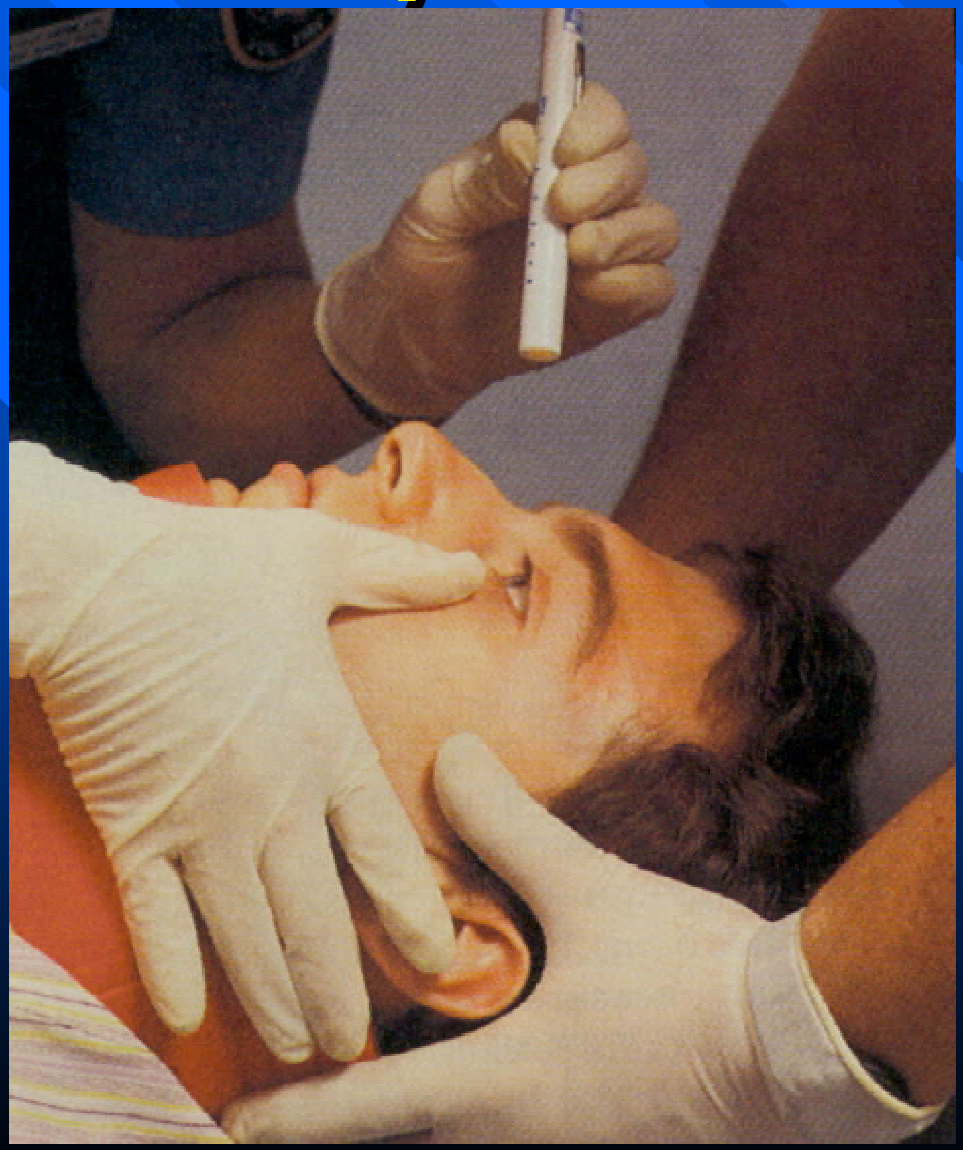
- Ears
  - DCAP-BTLS
  - Drainage

Ears

Detailed Physical Exam

- Eyes
  - DCAP-BTLS
  - Discoloration
  - Unequal pupils
  - Foreign bodies
  - Blood in the anterior chamber

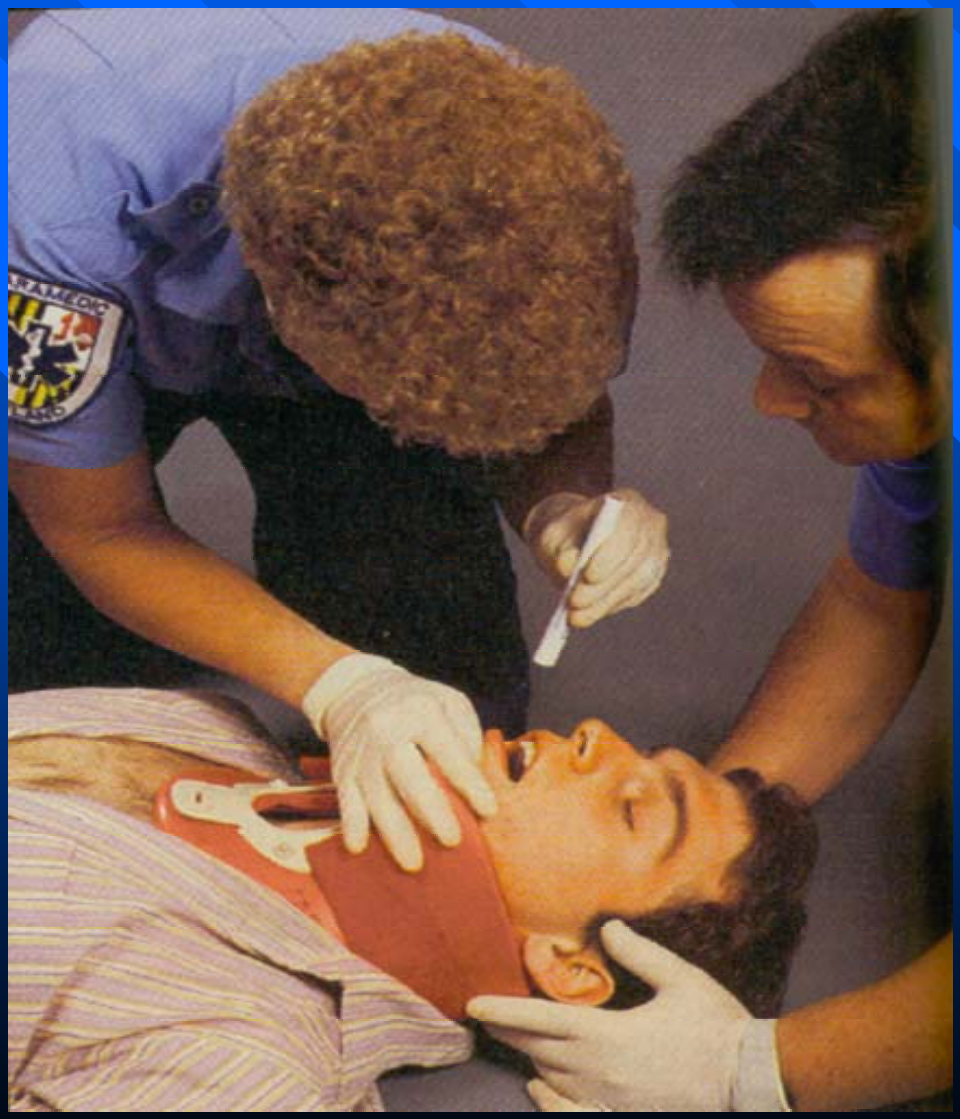
Eyes



Detailed Physical Exam

- Nose
  - DCAP-BTLS
  - Drainage

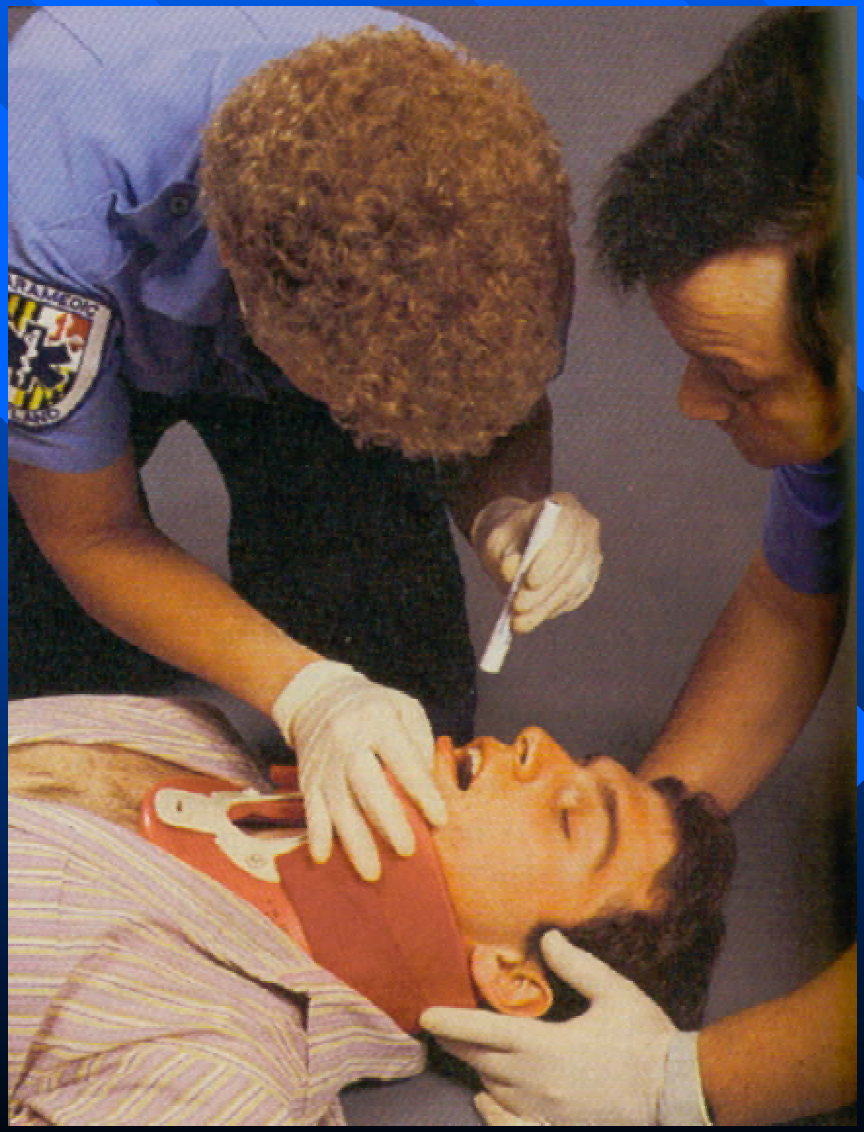
Nose



Detailed Physical Exam

- Mouth
  - DCAP-BTLS
  - Loose/broken teeth
  - Swelling/laceration of tongue
  - Unusual breath odor
  - Discoloration

Mouth



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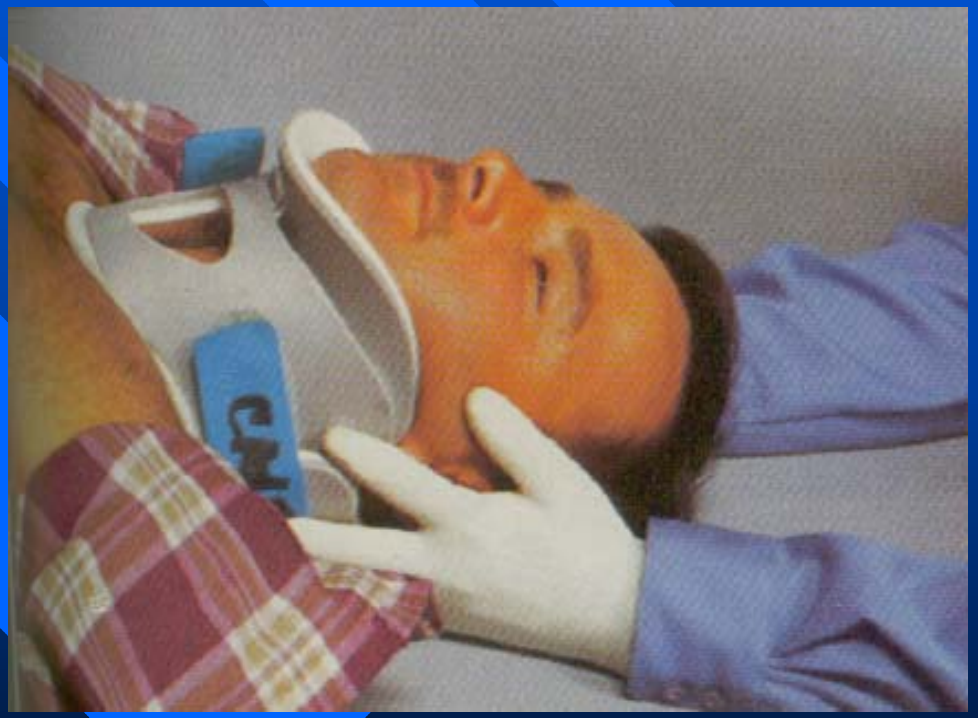

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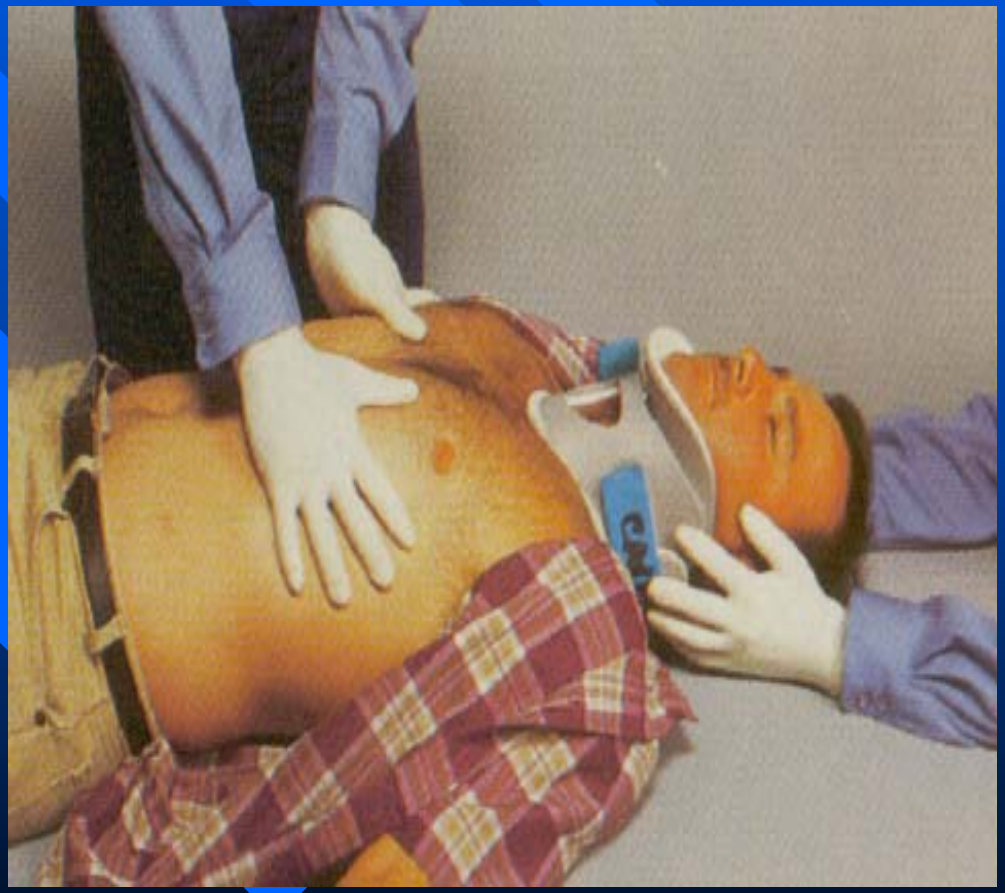

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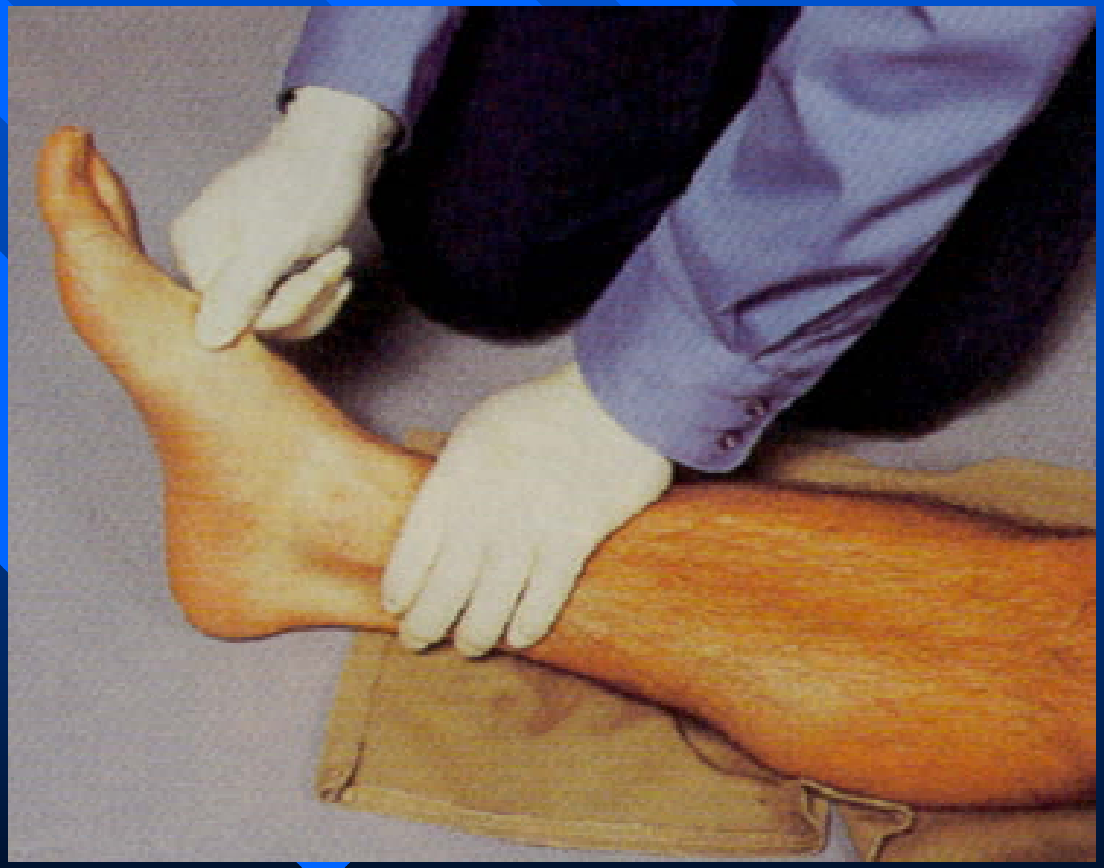

Detailed Physical Exam

- Posterior
  - DCAP-BTLS
  - Crepitation
- Reassess vital signs

Medical Patient - Responsive

- History of Present Illness
  - Purpose
    - »Find the patient's chief complaint
    - »Reduce anxiety and fear
    - »Best received from patient

History of Present Illness

- General information
  - Similar to a doctors interview
  - Interview patient first
  - Starts with most serious complaint

History of Present Illness

- General information
  - Ask open-ended questions
  - Have them describe as much as possible
  - Infants and children

OPQRST

- Onset
  - Try to find events leading to the incident
- Provocation
  - What makes it better or worse

OPQRST

- Quality
  - Have the patient describe the pain
- Radiation
  - Where is the pain exactly
  - Does it go anywhere

OPQRST

- Severity
  - How bad is it
- Time
  - When did it start
- Interventions

Medical Patient - Responsive

- SAMPLE History
- Focused physical exam
- Baseline vital signs
- Interventions and transport

Medical Patient - Unresponsive

- Rapid physical assessment
  - Same as the rapid trauma assessment
- Obtain baseline vital signs

Medical Patient - Unresponsive

- Sample history and HPI
  - Interview family and friends
- Provide emergency care/transport

Ongoing Assessment

- General information
  - It is important to observe and re-observe
    - »Not only to determine condition but also to detect any changes
    - »Patients condition may improve, stay the same, or get worse

Ongoing Assessment

- Trending
  - Evaluating and recording changes in a patient's condition
    - May show deterioration or improvement

Ongoing Assessment

- Perform the ongoing assessment
  - Repeat initial assessment
  - Repeat and record vital signs
  - Repeat hands-on assessment
  - Check interventions

Review

3-2.1 Identify why and when the focused history and physical exam for the trauma , medical and ongoing assessment must be done with at least 80% accuracy.

Review

- Trauma Patient
- Detailed Physical Exam
- Medical Patient
- Ongoing Assessment