Objectives

1. Define key terms introduced in this chapter.
2. Discuss the increased morbidity and mortality associated with multisystem trauma (slide 11).
3. Describe the importance of the golden principles of prehospital multisystem trauma assessment, care, and transport (slides 12-13).
4. Summarize anatomical and physiological changes of pregnancy that create special considerations in assessing and managing, and transporting pregnant trauma patients (slides 16-21).
5. Describe the relationship of maternal injuries to fetal distress and death (slides 18-19).

Objectives

6. Summarize anatomical and physiological changes in children that create special considerations in assessing and managing, and transporting pediatric trauma patients (slides 22-29).
7. Summarize anatomical and physiological changes in the elderly that create special considerations in assessing and managing, and transporting geriatric trauma patients (slides 30-35).
8. Discuss special considerations in assessing, managing, and transporting cognitively impaired trauma patients (slides 36-41).
Objectives

9. Discuss the assessment-based approach to multisystem trauma and trauma in special patient populations (slides 42-52).

Multimedia Directory

Slide 14  Multisystem Injuries in Front-End Collisions Animation
Slide 23  Some Differences between Pediatric and Adult Trauma Patients Animation
Slide 28  Immobilization Considerations for Pediatric Patients Video

Topics

* Multisystem Trauma
* Trauma in Special Patient Populations
* Assessment-Based Approach: Multisystem Trauma and Trauma in Special Patient Populations
CASE STUDY

Dispatch

EMS Unit 43

Respond to 587 Biltmore Lane for a 30-year-old patient who fell.

Time out 1730

Upon Arrival

• Met by four small children screaming and crying
• You hear a voice inside yell “Help me!”
• The children lead you to the stairwell
• There’s a pregnant woman on the floor at the base of the stairs next to a pile of laundry
How would you proceed to assess and care for this patient?

Multisystem Trauma

Golden Principles of Out-of-Hospital Multisystem Trauma Care
Trauma in Pregnant Patients

Anatomical and Physiological Considerations in the Pregnant Trauma Patient

Back to Objectives

• Two patients
• Anatomical considerations
• Physiological considerations

Assessment Considerations in the Pregnant Trauma Patient

Back to Objectives
Assessment Considerations

- Abruptio placenta
- Fetal distress causes

Management Considerations for the Pregnant Trauma Patient

- Tilt spine board to the left
- ABCs critical
- Check for major bleeding
- Consider ALS
Some Differences Between Pediatric and Adult Trauma Patients

Click here to view an animation on some differences between pediatric and adult trauma patients.

Return to Directory

- Signs of abuse
- Anatomical considerations
- Physiological considerations

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Trauma in Pediatric Patients

Assessment Considerations in the Pediatric Trauma Patient

Pediatric Assessment Triangle
• Appearance
• Work of breathing
• Circulation to skin

Assessment Considerations

Trauma in Pediatric Patients

Management Considerations for the Pediatric Trauma Patient
Immobilization Considerations for Pediatric Patients

Click here to view a video on immobilization considerations for pediatric patients.

Management Considerations

- Spine immobilization
- ABCs
- Administer O2
- Control bleeding
- Treat for shock
- Prevent heat loss
- Transport

Trauma in Geriatric Patients

Anatomical and Physiological Considerations in the Geriatric Trauma Patient
Trauma in Geriatric Patients

Assessment Considerations in the Geriatric Trauma Patient

- Second most common cause of trauma
- Anatomical considerations
- Physiological considerations

Assessment Considerations

- Preexisting conditions and medications
- Altered mental status
- ABCs
Management Considerations for the Geriatric Trauma Patient

- Spine immobilization
- ABCs
- Administer \( O_2 \)
- Prevent hypothermia
- Splint fractures
- Rapid transport

Trauma in Cognitively Impaired Patients

Anatomical and Physiological Considerations in the Cognitively Impaired Trauma Patient
Trauma in Cognitively Impaired Patients

Assessment Considerations in the Cognitively Impaired Trauma Patient

• Types of impairment
• Anatomical considerations
• Physiological considerations

• Can be poor historians
• Psychological implications
• Pain perception
• Trauma assessment
• High index of suspicion
Trauma in Cognitively Impaired Patients

Management Considerations for the Cognitively Impaired Trauma Patient

- Involve caregivers
- Err on the side of caution

Assessment-Based Approach: Multisystem Trauma and Trauma in Special Patient Populations
Scene Size-Up

Back to Objectives

• Scene safety
• Mechanism of injury
• Treat for possible head injury

Primary Assessment
• Cervical spine
• Mental status
• Airway
• Breathing
• Circulation

Secondary Assessment

• Physical exam
• Vital signs
• History
• Signs and symptoms
Emergency Medical Care

- Standard Precautions
- Spine stabilization
- ABCs
- Control bleeding
- Treat for shock
- Identify other injuries
- Transport

Reassessment
• Repeat ABCs
• Repeat vitals every five minutes

CASE STUDY

Follow-Up

CASE STUDY

Primary Assessment
• States she tripped on a toy going downstairs
• Establish in-line stabilization
• Seven months pregnant
• Now bleeding and having contractions
CASE STUDY

Primary Assessment
- Airway open; RR: 23; P: 120 bpm and thready
- Vaginal bleeding present; no crowning
- Place pad next to vagina

CASE STUDY

Secondary Assessment
- BP: 100/62 mmHg; P: 120bpm; RR: 23; lungs clear
- Contractions strong and ten minutes apart
- Neck pain, abdominal pain and tenderness; pain and swelling to right side of face

CASE STUDY

Secondary Assessment
- Pregnant five times; four living children
- Takes prenatal vitamins; allergic to penicillin
- Place patient on long backboard; place on left side
**CASE STUDY**

Treatment and Reassessment
- Monitor ABCs, vitals, and contractions
- No change en route
- Upon arrival transfer to ED staff
- Complete PCR and prepare ambulance for another call

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**Critical Thinking Scenario**

93-year-old male; victim of a fall at a local nursing home
- Patient fell out of his wheelchair in the recreation area while playing bingo
- Patient has a history of MI, CHF, lordosis, osteoporosis, and two strokes
- A nurse gives you his medication list, tells you to transport to the local ED, and then leaves

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**Critical Thinking Scenario**

- Patient is lying prone on the floor with obvious bleeding from his face and mouth
- Patient moans as you approach but doesn’t respond verbally to questions

Vital signs:
- HR: 96 bpm; radial pulse is strong
- RR: 28 per minute; irregular with minimal chest rise and fall

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Critical Thinking Questions

1. What immediate emergency care would you provide for the patient?
2. Do you consider this patient to be a high priority? Why?
3. What additional assessment and management considerations do you have for this patient based on his age?
4. What role do you believe his past history may have on his current condition?

Reinforce and Review

Please visit www.bradybooks.com and follow the myBradykit links to access content for the text.