


## Chapter 30 Putting It All Together for the Trauma Patient

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### Putting It All Together

- ✿ Balance need for prompt transport vs. treatment on scene.
- ✿ Select critical interventions to implement at scene of multiple-trauma patient.
- ✿ Choose an appropriate destination for a critical trauma patient.

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### Multiple Trauma

- ✿ More than one serious injury
- ✿ Mechanism of injury
- ✿ Teamwork
- ✿ Timing
- ✿ Transport decision

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**Multiple-Trauma Management**

- Motorcycle vs. car
- Scene safe
- 25-year-old adult male
- Unresponsive
- No helmet



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**Assessment Findings**

- Unresponsive to painful stimulus
- Gurgling
  - Suction
- Snoring
  - OPA
- Breathing shallow at 30 per minute
  - BVM with 100% oxygen
- Angulated thigh with bleeding
  - Control bleeding
  - Pulse



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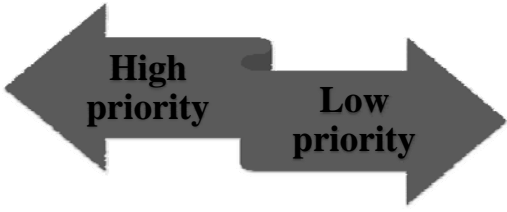
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**High priority** ← → **Low priority**



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 **Rapid Assessment—Findings**

❁ <b>Hematoma</b> – Left side of head	❁ <b>Pelvis</b> – Stable
❁ <b>Neck veins</b> – Flat	❁ <b>Femur</b> – Mid shaft fracture
❁ <b>C Spine</b> – No deformity	❁ <b>Forearm</b> – Minor lacerations
❁ <b>Breath sounds</b> – Decreased on left	❁ <b>Pulses</b> – Weak
❁ <b>Abdomen</b> – Soft	

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 **Transport**

❁ <b>Ventilations</b> – Continued	❁ <b>Oxygenation</b> – Chest rises
❁ <b>Re-assessment</b> – Multiple injuries	❁ <b>Dressing</b> – Intact
❁ <b>Mental status</b> – Unchanged	❁ <b>Pulse</b> – Rapid – Weak
❁ <b>Airway</b> – OPA – Gurgling – Suctioned	❁ <b>Priority</b> – High

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 **Second Initial Assessment**

- ❁ Report to trauma center
- ❁ ETA 10 minutes
- ❁ Vitals—pulse 108, BP 100/80, Resp. 12
- ❁ Pupils slow to react
- ❁ Mandible deformed
- ❁ Abdomen firm
- ❁ Mid-shaft femur left side
- ❁ Repeat vitals—pulse 120, BP 90/P, Resp. 12 assisted
- ❁ Skin pale and sweaty

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 **Arrival—Emergency Department**

- ✱ Mental status improves.
- ✱ Ventilation stopped
- ✱ Patient conscious, confused, and disoriented
- ✱ Vitals stabilized
- ✱ Traction splint applied.
- ✱ Further tests and surgery

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 **In-Hospital Findings**

- ✱ Cerebral contusion
- ✱ Bilateral fractured mandible
- ✱ Left hemothorax
- ✱ Fractured femur
- ✱ Discharged after lengthy stay

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 **Analysis**

✱ <b>Airway</b> <ul style="list-style-type: none"><li>- Partially obstructed</li><li>- Suctioned</li></ul>	✱ <b>High priority</b> <ul style="list-style-type: none"><li>- No traction splint</li><li>- No bandaging lacerations</li></ul>
✱ <b>Partial obstruction</b> <ul style="list-style-type: none"><li>- Snoring</li><li>- Artificial airway (OPA)</li></ul>	
✱ <b>Breathing</b> <ul style="list-style-type: none"><li>- Shallow</li><li>- Labored</li><li>- Inadequate</li><li>- Ventilated with high-concentration oxygen</li></ul>	

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 **Judgment**

The EMT showed good judgment by:



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 **General Principles**

✿ **Preparation:**

- Determine roles.
- Review roles en route to call.

✿ **Follow steps of assessment:**

- ABC
- DCAP
- BTLS
- PMS

(cont.)

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 **General Principles**

✿ **Priorities:**

- Airway
- Breathing
- Circulation

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**Scene Treatment**

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graph TD; A[Suctioning airway] --> B[Inserting OPA]; B --> C[Seal sucking chest wound]; C --> D[Ventilation]; D --> E[Oxygenation]; E --> F[Bleeding control]; F --> G[Immobilization of c spine];
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**Additional Principles**

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graph LR; A[Scene safety] --> B[Assure an open airway]; B --> C[Perform urgent or emergency moves as necessary]; C --> D[Adapt to the situation];
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**Trauma Scoring**

- ❖ Determines need for a trauma center
- ❖ Allows less seriously injured to go to local hospitals
- ❖ Assists in evaluating outcomes of trauma patients with similar severity of injuries
- ❖ Follow local protocol for use.

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**Revised Trauma Score**

REVISED TRAUMA SCORE		
Characteristic	Criterion	RTS Points
Glasgow Coma Scale	13-15	4
	9-12	3
	6-8	2
	4-5	1
	3	0
Systolic Blood Pressure	> 90 mmHg	4
	70-89 mmHg	3
	50-69 mmHg	2
	1-49 mmHg	1
	0	0
Respiratory Rate	10-20/min	4
	> 20/min	3
	6-9/min	2
	1-5/min	1
	0	0
Revised Trauma Score (Total)		

Source: Champion HR, Sacco WJ, Coppen RL, et al. A Revision of the Trauma Score. J Trauma 29 (3): 623-9, 1990

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**Review Questions**

1. What considerations must the EMT weigh when considering whether to perform an intervention at the scene?
2. What are the interventions that should generally be performed for a critical trauma patient at the scene?

(cont.)

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**Review Questions**

3. When might it be appropriate for EMTs to bypass a closer hospital for a trauma center?
4. What are the three "Ts" of multiple-trauma patient management?
5. When might it be appropriate not to apply a traction splint in the field to an obviously fractured femur?

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**Street Scenes**



**Street Scenes**

- What is your initial impression of the crash?
- What additional resources will be necessary on-scene?

(cont.)

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**Street Scenes**



**Street Scenes**

- Which patient should be transported first?
- What is your critical decision regarding the female patient?
- What critical interventions should you perform on-scene?

(cont.)

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**Street Scenes**



**Street Scenes**

- What further information would you like to obtain about the female patient?
- To what type of receiving facility should your patient be transported?

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