29

Chest and Abdominal Trauma
Figure 29-1  Flail chest occurs when blunt trauma creates a fracture of two or more ribs in two or more places.
Figure 29-2  Paradoxical motion.
Figure 29-3  Creating a flutter valve to allow air to escape from the chest cavity.

On inspiration, dressing seals wound, preventing air entry

Collapsed lung
Figure 29-3 (continued)  Creating a flutter valve to allow air to escape from the chest cavity.

Expiration allows trapped air to escape through untaped section of dressing
Figure 29-4  Seal three edges of an occlusive dressing for an open chest wound.
Figure 29-5a  (A) An open chest wound from a gun shot. (B) An Asherman Chest Seal applied to the wound. (© Edward T. Dickinson, MD)
Figure 29-5b  (A) An open chest wound from a gun shot. (B) An Asherman Chest Seal applied to the wound. (© Edward T. Dickinson, MD)
Figure 29-6  Air can enter the chest cavity through a puncture in the chest wall. This can cause a collapse of a lung and impaired breathing.
Figure 29-7  Pneumothorax, hemothorax, and hemopneumothorax.
Figure 29-8  A patient suffering traumatic asphyxia. (© Edward T. Dickinson, MD)
Figure 29-9  An abdominal evisceration from a stab wound. (© Edward T. Dickinson, MD)
Figure 29-10  X-ray showing two bullets that entered the patient’s abdomen on the right side (at the paper clips), and then fragmented throughout the abdomen. (© Edward T. Dickinson, MD)
Scan 29-1  Dressing an Open Abdominal Wound  FIRST TAKE STANDARD PRECAUTIONS
Cover the dressed wound to maintain warmth. Secure the covering with tape or cravats tied above and below the position of the exposed organ.
Scan 29-1 (continued)  Dressing an Open Abdominal Wound  FIRST TAKE STANDARD PRECAUTIONS
Open abdominal wound with evisceration. (1) Cut away clothing from the wound.
Scan 29-1 (continued)  Dressing an Open Abdominal Wound  FIRST TAKE STANDARD PRECAUTIONS

(2) Soak a sterile dressing with sterile saline.
Scan 29-1 (continued)  Dressing an Open Abdominal Wound  FIRST TAKE STANDARD PRECAUTIONS
(3) Place the moist dressing over the wound. It may be necessary to remoisten the dressing with additional sterile saline to keep the eviscerated organ or organs from drying out.
Scan 29-1 (continued)  Dressing an Open Abdominal Wound  FIRST TAKE STANDARD PRECAUTIONS
(4) Apply an occlusive dressing over the moist dressing if your local protocols recommend taking this action.