

## METACARPAL FRACTURES

Metacarpal fractures commonly result from a direct blow to the hand. Although many metacarpal fractures can be treated nonoperatively, intra-articular or displaced fractures might require reduction, with or without surgical fixation.

### Mechanism of Injury

- Usually result from a direct blow to hand.
- A “boxer’s fracture” of the fifth metacarpal neck results from punching an object or person (Figure 9-1).

### Evaluation

- Patient presents complaining of pain or swelling following trauma.
- Assess tenderness, ecchymosis, or swelling at the site of the injury.
- A “loss of knuckle” might be observed with shaft fractures.
- Evaluate for scissoring of digits by asking the patient to flex digits into a fist slowly (Figure 9-2).
- The integrity of the skin can be compromised if the hand punched a tooth; this “fight bite” must be treated with special care (see Chapter 30).
- Assess AP, lateral, and oblique radiographs of the hand for the presence of fracture(s), angulation, rotation, displacement, or intra-articular extension.
- The base of the metacarpal must be evaluated to ensure there is no carpometacarpal dislocation; this is noted when the 4 metacarpals are not aligned in parallel on a lateral radiograph (Figure 9-3).