



Ortho pearls for the EM professional.

**“Hey Batter Batter”**

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A 25 year-old male presents to the ED with left hand pain that started after batting practice. Exam reveals tenderness over the hypothenar eminence.



**Questions:**

**What is your diagnosis?**

**What is the mechanism of injury?**

**How do patients present?**

**How is it diagnosed?**

**Is Orthopedic consultation required in the ED?**

**What is your management in the ED?**

**What is your disposition?**

**Figure 1:** Case courtesy of Jeffrey Hocking, Radiopaedia.org, rID: [75703](#)

## 1. What is your diagnosis?

The patient is diagnosed with a **hook of the hamate fracture**.

## 2. What is the mechanism of injury? How do patients present?

Hook of the hamate fractures are often associated with sports that require a firm hand grip and repeated stress against the hamate bone, such as baseball, tennis, golf [1]. Patients present with tenderness to palpation over the hypothenar eminence. They may have associated neuropathy and paresthesias in the ulnar nerve distribution as the hook of the hamate forms the radial border of Guyon's canal [2].

**Pearl:** The pull test may be helpful in diagnosis. Patients may have pain when flexing the DIP joints of the 4th and 5th fingers because the flexor tendons course over the hook of the hamate [2].



**Figure 1:** Case courtesy of Jeffrey Hocking, Radiopaedia.org, rID: [75703](#).

## 3. How is it diagnosed?

This diagnosis is made with x-ray imaging. If x-ray imaging is negative and there is a high index of suspicion, CT imaging may be warranted [1].

**Pearl:** You may order a **carpal tunnel view** (Figure 2) for a better view of the hook of the hamate.



**Figure 2:** Case courtesy of Maulik S Patel, Radiopaedia.org, rID: [72958](#).

#### 4. Is Orthopedic consultation required in the emergency department?

Emergent orthopedic consultation is not required in the emergency department unless there is concern for an open fracture. However, these patients should have urgent follow up on an outpatient basis.

#### 5. What is your management in the ED? What is your disposition?

In the ED, patients should be placed in an **ulnar gutter splint** and recommended close outpatient orthopedic followup. **These fractures have a high risk of non-union and symptomatic nonunions often require surgical repair/excision [2].**

**Pearl:** Excision of the fracture segment can be performed for faster recovery and return to sport [2].

#### References:

1. Abrego MO, De Cicco FL. Hamate Fractures. In: *StatPearls*. StatPearls Publishing; 2022. Accessed February 8, 2023. PMID: [31335034](#)
2. Tian A, Goldfarb CA. Hook of Hamate Fractures. *Hand Clinics*. 2021;37(4):545-552. PMID: [34602134](#)