



In each issue, *JUCM* will challenge your diagnostic acumen with a glimpse of x-rays, electrocardiograms, and photographs of conditions that real urgent care patients have presented with.

If you would like to submit a case for consideration, please email the relevant materials and presenting information to editor@jujm.com.

Sudden Midfoot Pain in an 8-Year-Old Boy



Case

The patient is an 8-year-old boy with pain in the right foot for the last several hours. He refuses to walk on the foot. There is no reported injury.

On physical exam, you find there is a normal appearance to the foot (no erythema, swelling). However, there is pain with palpation over the plantar aspect of the mid aspect of the right foot.

View the image taken (**Figure 1**) and consider what your diagnosis would be. Resolution of the case is described on the next page.

THE RESOLUTION

Figure 2.

**Differential Diagnosis**

- Metatarsal fracture
- Lisfranc dislocation
- Osteolytic lesion
- Foreign body
- Osteomyelitis

Diagnosis

The x-ray shows a foreign body. There is a 4 mm linear radiodensity in the plantar aspect of the mid foot, just beneath the skin surface. There is no bone abnormality present.

Learnings/What to Look For

- Glass is radiopaque, independent of lead content or other additives.
- If a patient is cut by glass, even if a cut is not seen in the skin and even if a foreign body is not able to be palpated, an x-ray should be done.
- Plain radiographs will also show (poorly) metal, gravel, or bone, but will not visualize wood.
- If a wood foreign body is not seen on a plain radiograph, consider CT, MRI, or ultrasound.

Pearls for Initial Management and Considerations for Transfer

- Removal can be considered when the foreign body is superficial and easily palpable, but when it is deep or poorly visualized, consider the risks of blind probing, as this may damage tissues and lead to infection.
- Transfer to the ED is advised with severe pain, possible damage to blood vessels or nerves, diagnostic uncertainty, and in patients at high risk of infection, such as those with diabetes or who are immunosuppressed.
- In lieu of ED transfer in stable patients, consider contacting and arranging expedited referral to an orthopedist or plastic surgeon.