INSIGHTS IN IMAGES

CLINICAL CHALLENGE: CASE 1

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@jucm.com*.

A 51-Year-Old Woman with Wrist Pain After a Fall

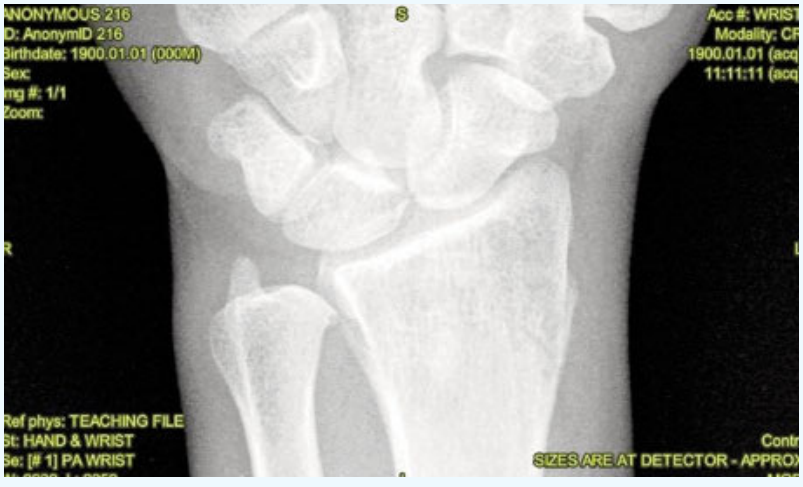


Figure 1.

Case

A 51-year-old woman presents with wrist pain and swelling after tripping on a loose piece of carpeting and falling on her outstretched hand.

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

THE RESOLUTION

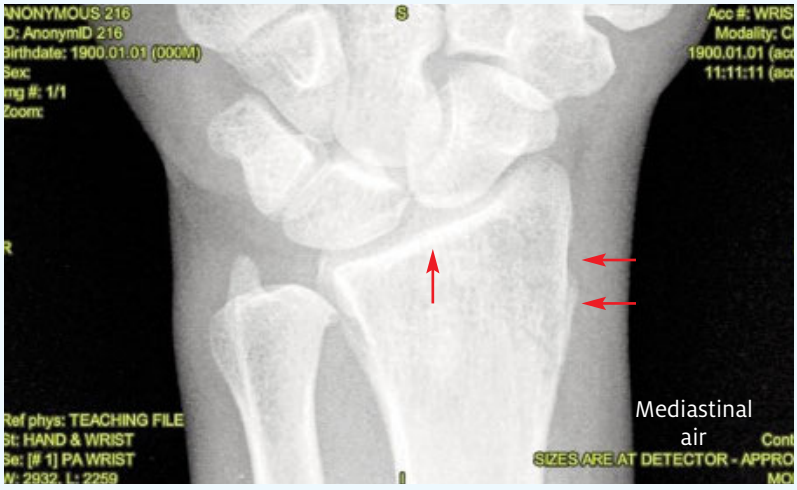


Figure 2.

Differential Diagnosis

- Barton's fracture
- Distal radial metaphysis fracture
- Distal styloid fracture
- Radial styloid fracture

Diagnosis

The patient has an acute fracture of the distal radial metaphysis.

Learnings

- Often, as in this case, the fracture can be very subtle if nondisplaced. In elderly patients with osteopenia, the diagnosis can be very difficult. Subtle linear lucency or cortical disruption should be viewed with suspicion
- The eponyms *Colles* and *Smith* are used for fractures which are angulated dorsally and volarly, respectively
- It is very important to look for complicating factors such as intra-articular extension, involvement of distal ulnar joint, or radial shortening

Pearls for Urgent Care Management and Considerations for Transfer

- If there is a question of a fracture, splint and have the patient follow up
- High-risk fractures include scaphoid, interarticular, Salter-Harris, and fracture/dislocations
- Splinting and rapid follow-up are essential

CLINICAL CHALLENGE: CASE 2

A 74-Year-Old Man with Epigastric Pain

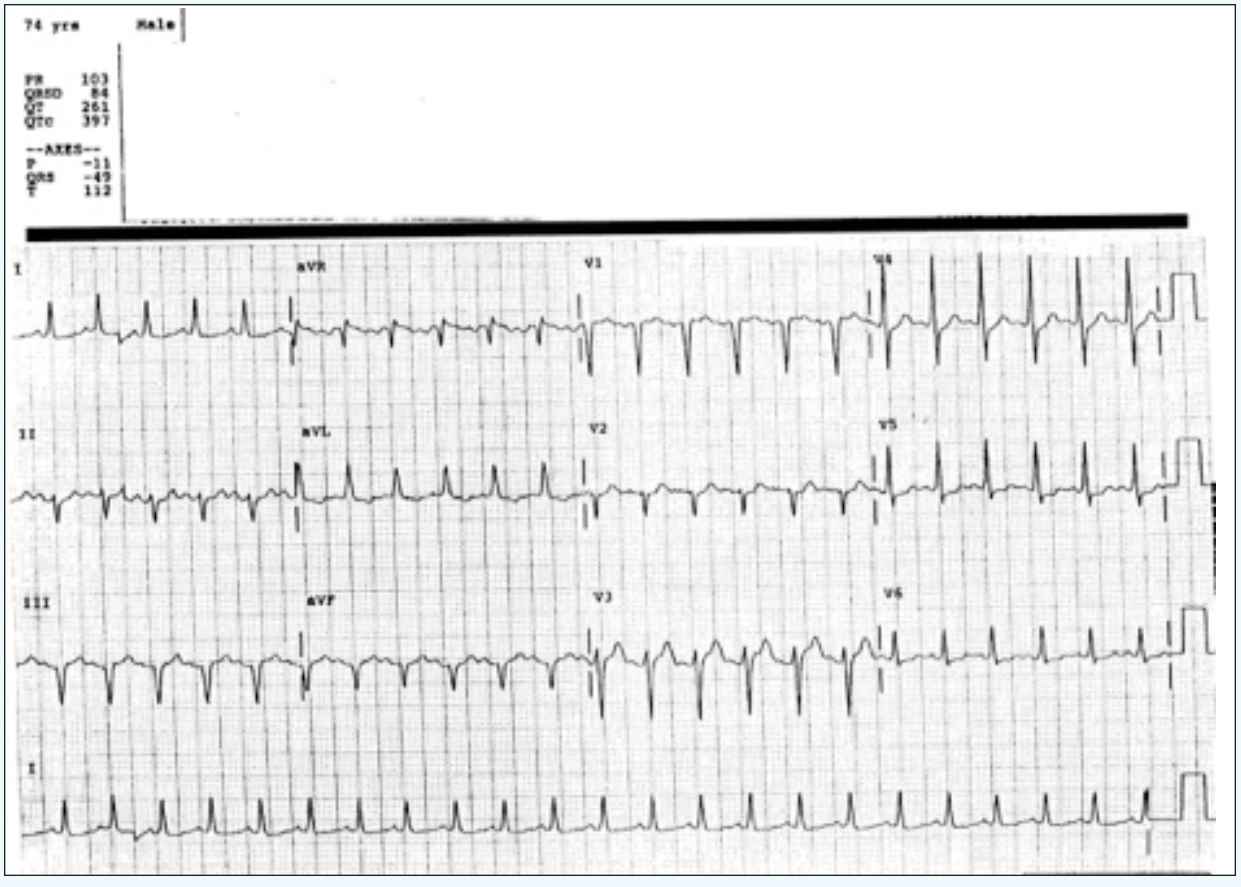


Figure 1.

Case

The patient is a 74-year-old man who complains of epigastric pain. He is an alcoholic who has had multiple episodes of pancreatitis. He has no chest pain, shortness of breath, or diaphoresis. An ECG is performed by staff prior to provider evaluation.

Upon exam, you find:

General: Alert and oriented

Lungs: CTAB

Cardiovascular: RRR without murmur, rub, or gallop, occasional irregular beats

Abdomen: Soft and NT without r/r/g

View the ECG taken and consider what the diagnosis and next steps would be. Resolution of the case is described on the next page.

THE RESOLUTION

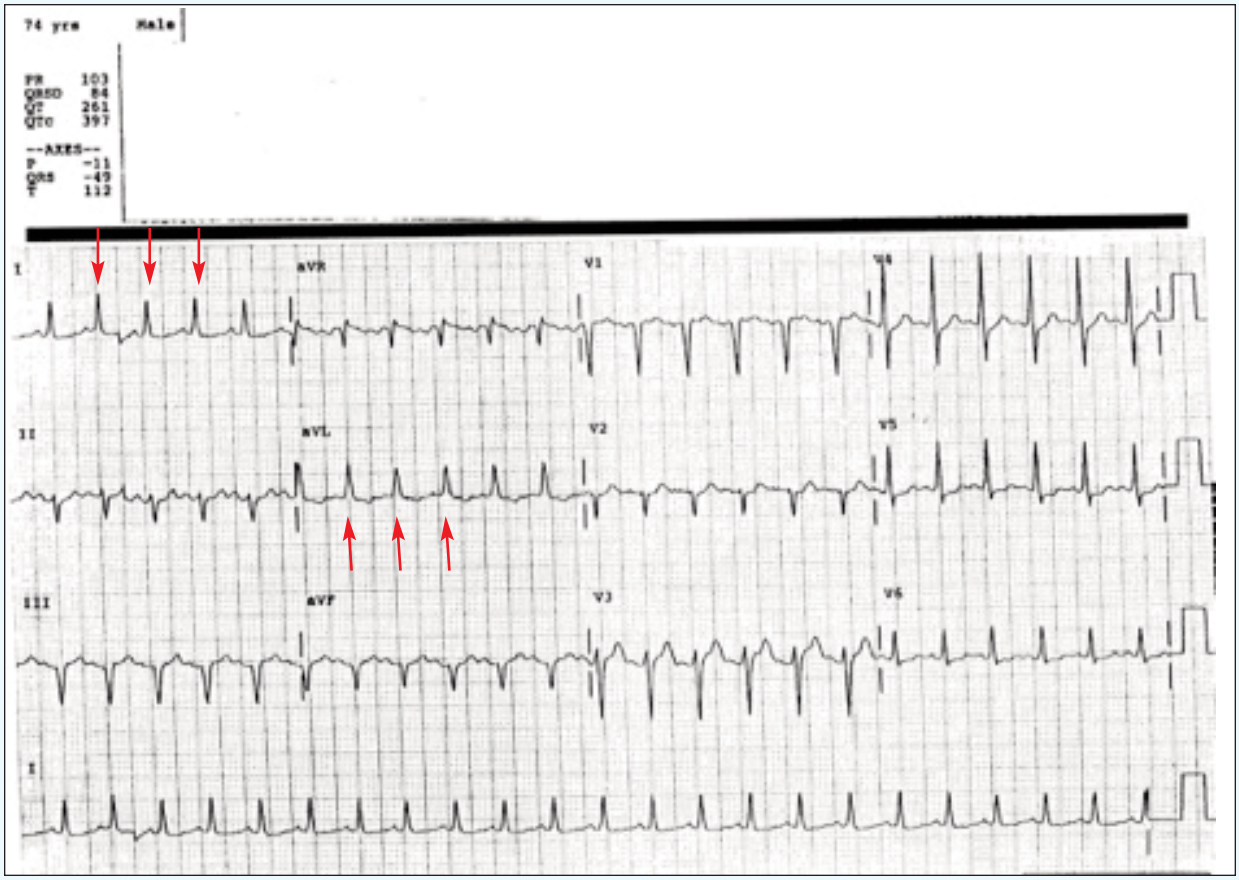


Figure 2.

Differential Diagnosis

- Anterior STEMI
- Right bundle branch block
- Left axis deviation
- Brugada syndrome
- Wellen's syndrome

Diagnosis

The patient was diagnosed with a left axis deviation. The ECG reveals normal sinus rhythm with an axis of -49, confirming left axis deviation (LAD). There are also some ST depressions laterally (I, aVL, V5, V6) which could indicate ischemia.

Learnings/What to Look for:

- The normal axis of an ECG is -30 to +90
- LAD is defined as -30 to -90
- Causes of left axis deviation may include idiopathic/normal variation, left ventricular hypertrophy, inferior MI, paced rhythm, left anterior hemiblock/left bundle branch block (LBBB), preexcitation such as Wolff-Parkinson-White (WPW), and congenital heart disease

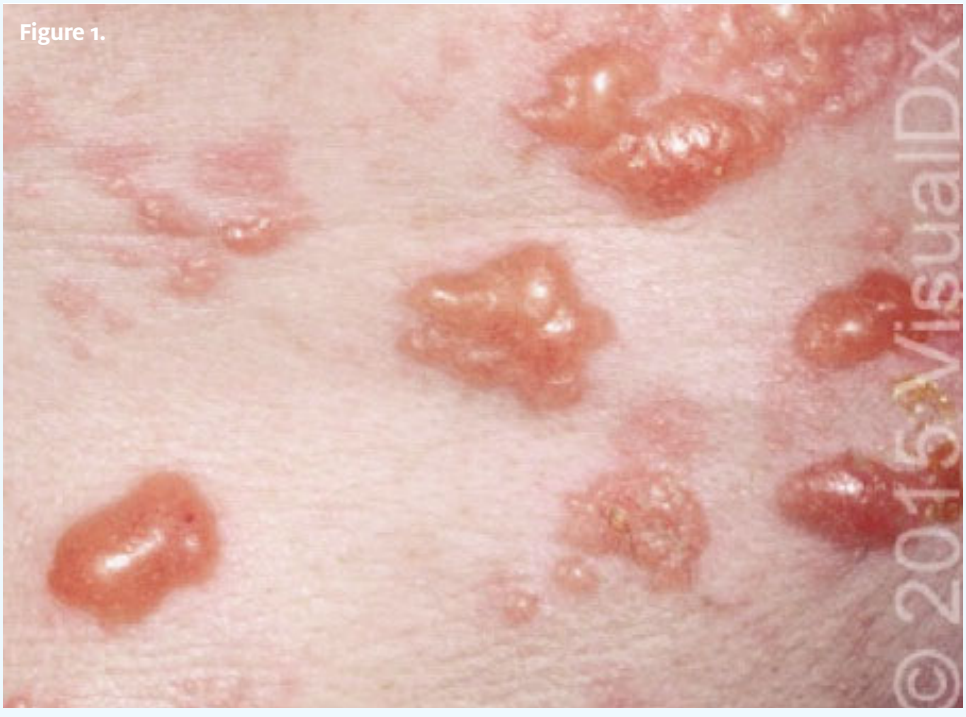
Pearls for Urgent Care Management and Considerations for Transfer

- Compare with a previous ECG, if available
- Though this finding is often benign, the history will help to direct consideration of more serious etiologies
- Consideration of ischemia/infarction, new-onset LBBB, or symptomatic preexcitation requires transfer and emergent management, though most of the time a finding of LAD will be a normal variation and often present on previous tracings

CLINICAL CHALLENGE: CASE 3

A Patient with HIV and New Vesicles on the Leg

Figure 1.



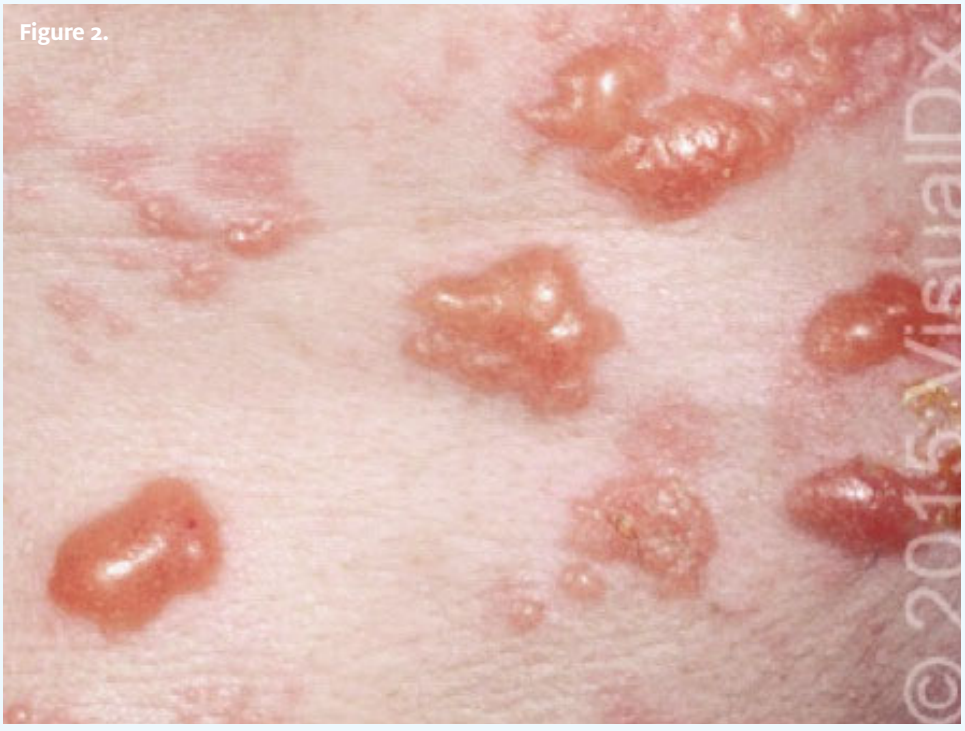
Case

A 35-year-old, HIV-infected patient who recently started highly active antiretroviral therapy (HAART) presents to your urgent care center very concerned about a large group of vesicles that had appeared on her leg. She recalls feeling a burning sensation for several days before they appeared. Upon probing, she tells you that she's also had headache, neck pain, and fatigue.

View the photo and consider what your diagnosis and next steps would be. Resolution of the case is described on the next page.

THE RESOLUTION

Figure 2.



Differential Diagnosis

- Allergic contact dermatitis
- Erysipelas
- Herpes simplex virus infection
- Herpes zoster in immunocompromised patient

Diagnosis

The image shows herpes zoster in this immunocompromised patient.

Learnings

- Herpes zoster (shingles) is a reactivation of a latent infection with the varicella-zoster virus
- After primary infection (chickenpox), the virus lays dormant for life. Reactivation may be triggered by immunosuppression, medications, infections, and physical or emotional stress
- Disseminated zoster (>20 vesicles) outside of the primary and adjacent dermatomes is chiefly a problem of patients with AIDS, those on immunosuppressive drugs, and patients with cancer

Pearls for Urgent Care Management and Considerations for Transfer

- Antiviral agents are indicated within 48-72 hours of onset of symptoms. Prednisone will decrease severity and duration of symptoms, but does not decrease incidence of postherpetic neuralgia
- Consider emergent transfer with disseminated zoster, hemodynamic instability, altered level of consciousness, or diagnostic uncertainty