

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 16-Year-Old with Severe Pain and Immobility After a Basketball Mishap



Case

The patient is a high school athlete who is brought to your urgent care center with severe pain in the area of his right foot and ankle. He reports that he jumped for a rebound, landing hard on another player's foot with his full weight on his right foot.

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





INSIGHTS IN IMAGES: CLINICAL CHALLENGE

THE RESOLUTION







Differential Diagnosis

- Avulsion fracture of the proximal 5th metatarsal
- Chopart fracture/dislocation
- Jones fracture
- Chopart fracture/dislocation and Jones fracture
- Iselin disease

Diagnosis

This patient suffered a Chopart fracture/dislocation and a Jones fracture.

Chopart fracture: There is widening and asymmetry of the talonavicular and calcaneocuboid joints that are compatible with dislocation. Fractures of the medial aspect of the navicular and medial cuneiform are noted.

Jones fracture: In this case, there is fracture of the proximal aspect of the fifth metatarsal in the region of the metadiaphyseal junction. Asymmetric thickening of the lateral aspect of the fifth metatarsal cortex suggests prior injury and refracture.

Learnings

- Chopart fracture/dislocation
 - This relatively uncommon injury involves the midtarsal joints (talonavicular and calcaneocuboid joints). There are frequently associated fractures of the calcaneus, cuboid, and navicular
 - Typically caused by falls from a height, motor vehicle accidents, and severe twisting injuries such as can occur in basketball players who land on a plantar-flexed and inverted foot
- Iones fracture
 - Jones fractures are located at the metadiaphyseal junction, approximately 2 cm (1.5-3 cm) from the tip of the 5th
 - This area receives less blood and is therefore more prone to difficulties in healing, with rates of nonunion as high as 30%-50%
 - Typically caused by forced inversion of plantarflexed foot

Acknowledgment: Images courtesy of Teleradiology Specialists.

A 62-Year-Old Woman with Palpitations

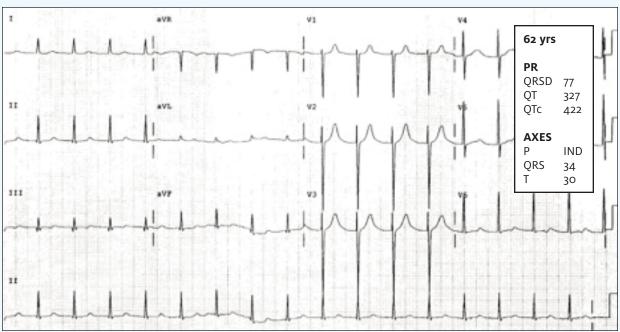


Figure 1.

Case

The patient is a 62-year-old woman who presents to your urgent care center with a feeling of palpitations, which began the previous evening. She has no chest pain or shortness of breath, but does feel "clammy." She takes no medications. Her history includes MI and CABG 5 years ago. Upon exam, you find:

- **General:** Alert and oriented X 3, skin color good but clammy
- Lungs: CTAB
- **Cardiovascular:** Tachycardic and regular without murmur, rub, or gallop

- **Abdomen:** Soft and NT, no pulsatile mass
- **Ext:** No peripheral edema, pulses are 2+ and equal in all ex-

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

INSIGHTS IN IMAGES: CLINICAL CHALLENGE

THE RESOLUTION



Figure 2.

Differential Diagnosis

- First-degree AB block
- Normal sinus rhythm
- Atrial flutter
- Junctional rhythm
- Wenckebach type 1

Diagnosis

This patient was diagnosed with junctional rhythm.

The ECG reveals a regular rate. There are no P waves, making first-degree AV block impossible. The rhythm is regular, so this is not atrial fibrillation. Wenckebach type 1 has a gradual lengthening of the PR interval until there is a dropped beat (a P without a QRS following) and is not occurring in this ECG. Normal sinus rhythm would require a P wave before each QRS. There are no P waves evident on the tracing; this ECG shows a junctional rhythm.

Learnings/What to Look for

- Junctional rhythm has the depolarization initiated at the cardiac junction, at the AV node; as there is no atrial depolarization, there are no P waves
- The rate is typically slow, between 40 and 60 beats per minute. As the depolarization is initiated above the ventricles, it results in a narrow QRS complex

- Junctional rhythms may occur in patients with sick sinus syndrome (SSS) or simply with significant bradycardia
- Patients with junctional rhythm do not have an increased morbidity or mortality (unless the underlying cause, such as SSS, would result in a changed morbidity or mortality)

Pearls for Urgent Care Management and **Considerations for Transfer**

- Inquire about signs of ischemia such as chest discomfort, shortness of breath, diaphoresis, or dizziness, as well as hemodynamic instability such as hypotension, dizziness, or confusion
- Compare to an old ECG to see if the rhythm is new or an incidental finding
- Consider checking electrolytes in patients who may have abnormalities, such as patients on diuretics or those with renal failure
- If the patient is asymptomatic and the rhythm is found incidentally, inform the patient of the rhythm, but no further urgent care management is necessary, and the patient may follow up as an outpatient with primary care



A 72-Year-Old Man with **Black Skin Lesions**



Case

A 72-year-old man brought his wife into the urgent care center because she woke up with a raw throat and fever. However, he also asks to see a clinician to ask about multiple black skin lesions on his cheeks and eyelids. Once in the exam room, he notes that he spent more than 40 years in the landscaping business, getting considerable sun exposure. He knows that put him at risk for skin cancer. In addition, he recently quit smoking after 48 years.

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

INSIGHTS IN IMAGES: CLINICAL CHALLENGE

THE RESOLUTION



Differential Diagnosis

- Acne vulgaris
- Colloid milium
- Favre-Racouchot disease
- Sebaceous hyperplasia
- Syringomas

Diagnosis

This patient was diagnosed with Favre-Racouchot disease (FRD), also known as solar or senile comedones.

Learnings

■ FRD is a disorder of the skin, resulting from chronic exposure to the sun and culminating with small cysts and large blackheads that form on the face and neck. It is also more common in patients with a heavy smoking history, in males, and in whites.

- Unlike the comedones in acne vulgaris, FRD comedones do not become inflamed
- The lesions are most commonly seen on the face (in particular on the temples, cheeks, and periorbital area) of elderly adults

Pearls for Urgent Care Management and Considerations for Transfer

■ Because FRD is benign, any treatment, other than advising the patient to use sun-protection measures, would be for cosmetic purposes only

Acknowledgment: Images courtesy of VisualDx.