



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@juqm.com.

A Runner with a History of Foot Pain

Figure 1.



Case

The patient is a 27-year-old male who presents to urgent care with foot pain, for which he says there is no explanation. With probing, he reveals that he is a “fanatic” about running, and that the pain has persisted for close to 7 months.

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

Figure 2.



THE RESOLUTION



Mediastinal
air

Differential Diagnosis

- Capsulitis
- Freiberg disease
- Metatarsal stress fracture
- Metatarsalgia
- Tendinitis

Diagnosis

The patient was diagnosed with Freiberg disease/avascular necrosis/osteochondritis of the second metatarsal head.

Learnings

- This diagnosis occurs most often in patients from adolescence into the second decade of life
- The triggering event is trauma or repetitive trauma leading to metaphyseal microfractures, compromised vascular supply, and avascular necrosis
- Typically, head regions of the second or third metatarsal bones are involved

Pearls for Urgent Care Management and Consideration for Transfer

- The radiographic findings are those of avascular necrosis. Findings include flattened, collapsed head region of the metatarsal bone, fragmentation of the metatarsal head, loose bodies in the MP joint, zone of demarcation, sclerosis, and deformed sclerotic head upon healing
- Diagnosis is based on plain radiograph or MRI showing an avascular necrosis
- Treatment consists of rest, modification of physical activities, immobilization, and surgery if necessary

Acknowledgment: Images courtesy of Teleradiology Specialists.



A 61-Year-Old Man Who Is Lightheaded and Dizzy

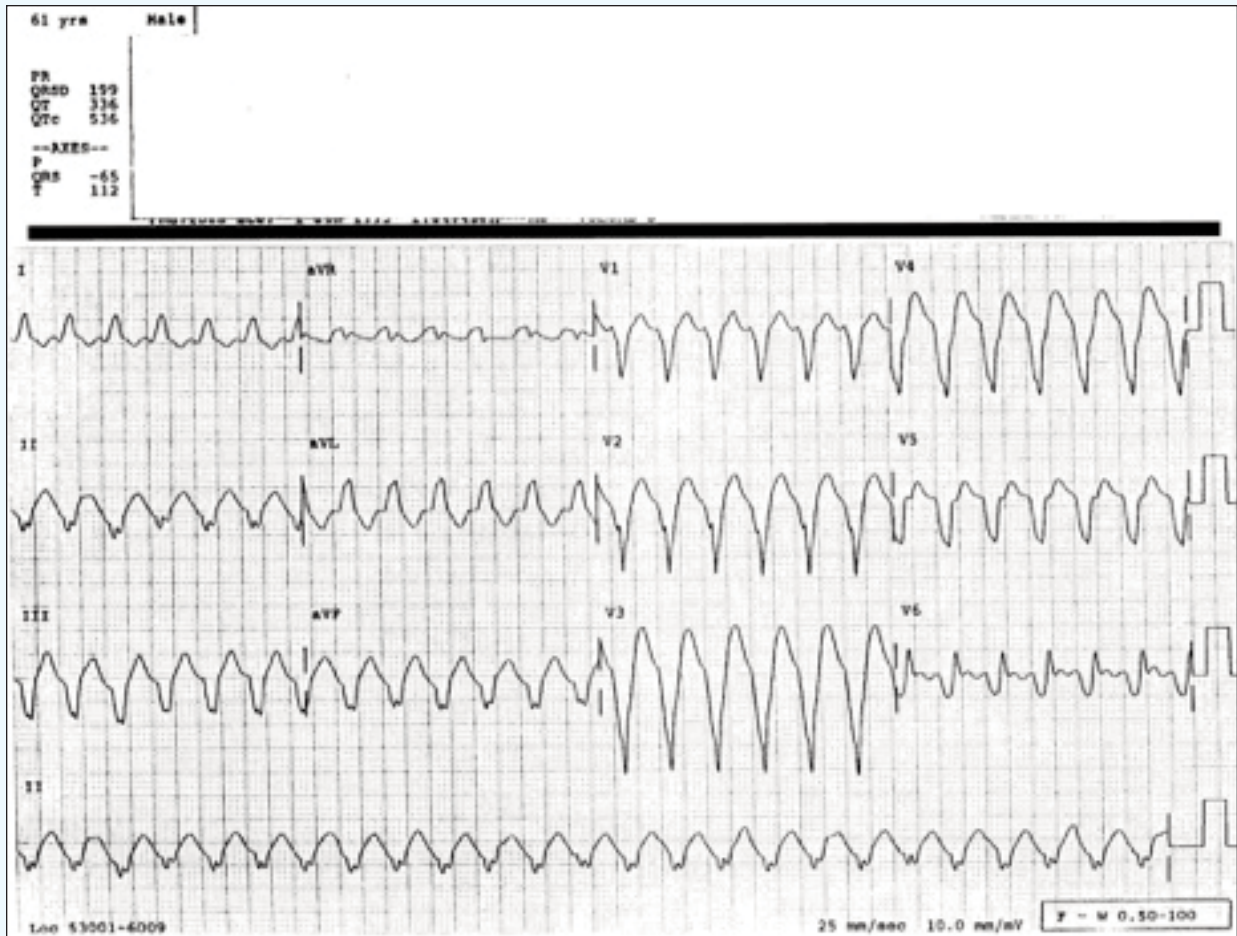


Figure 1.

Case

The patient is a 61-year-old man who presents to the urgent care center with lightheaded dizziness, which he says started several hours prior to arrival. He denies chest pain, syncope, and shortness of breath but says he feels “clammy.” He is not taking any medications on a regular basis and has no history of myocardial infarction, but he had a stent placed 8 years ago.

Upon exam, you find:

General: Alert and oriented X 3, mildly tachypneic, skin color good but slightly moist

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 extremities

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

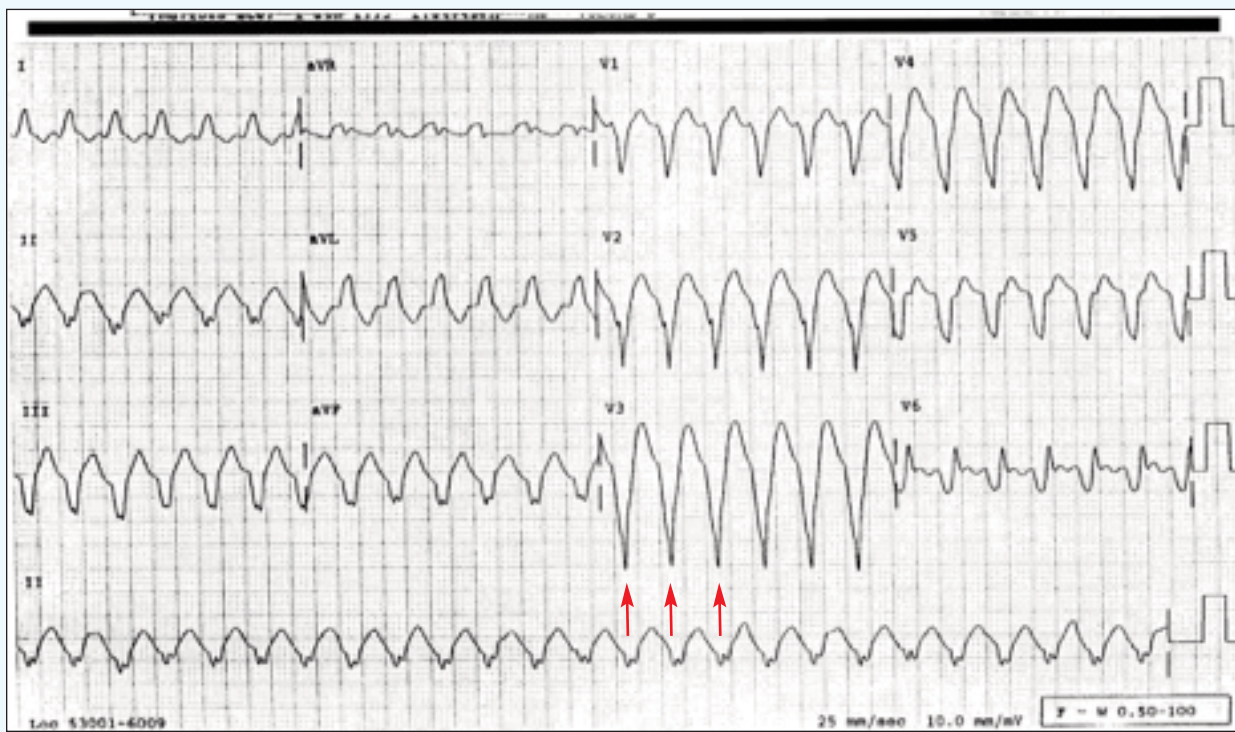


Figure 2.

Differential Diagnosis

- Anterior STEMI
- Grouped premature ventricular contractions
- Ventricular tachycardia
- Atrial flutter
- Atrial fibrillation with preexcitation

Diagnosis

This patient was diagnosed with ventricular tachycardia (VT).

The ECG reveals a regular rhythm which is tachycardic, with a rate just above 150 bpm. There are no defined ST elevations across the anterior precordium, V₃ and V₄, so anterior STEMI is unlikely.

Grouped premature ventricular contractions (PVC) would be seen as a ventricular complex which occurs intermittently with sinus rhythm. Focusing on lead II (on the bottom of the ECG), we see that all the complexes here are the same, making a PVC or grouped PVCs unlikely.

Atrial flutter should show a sawtooth pattern, best seen in leads V₁ and V₂, and though the rate is close to 150 (commonly seen with atrial flutter), there are no “flutter” waves.

Atrial fibrillation is an irregularly irregular rhythm, but our

patient’s rhythm is regular, so Afib is not occurring.

The ECG shows a wide complex, regular tachycardia without preceding P waves; this is VT.

Learnings/What to Look for

- VT is a wide complex tachycardia originating in the ventricles
- Monomorphic VT has complexes which originate from the same ventricular focus and are identical in appearance
- VT patients may be stable, as was our patient, or profoundly hemodynamically unstable

Pearls for Urgent Care Management and Considerations for Transfer

- Inquire about signs of ischemia such as chest discomfort, shortness of breath, diaphoresis, or dizziness
- Assess for hemodynamic instability such as hypotension, dizziness, or confusion
- VT is a true cardiac emergency and EMS should be emergently activated. While waiting, place the patient on a monitor and attempt to establish IV access
- Unstable patients require emergent cardioversion



A 28-Year-Old Man Complaining of Tiredness, Myalgia, and Sore Throat

Figure 1.



Case

The patient is a 28-year-old man who presents to urgent care with a fever and complaints of tiredness, myalgia, and sore throat. You note that he has pink, scaly papules on his palms and soles. He also has patchy alopecia developing on his scalp, which he says is a very recent development.

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**

- Alopecia areata
- Pityriasis rosea
- Reactive arthritis
- Secondary syphilis

Diagnosis

This patient was diagnosed with secondary syphilis, the second stage of the infection caused by spirochete, which has spread throughout the entire body. Typically, it occurs 1–3 months after the appearance of the primary syphilitic chancre.

Learnings

- Secondary syphilis is characterized by hematogenous and lymphatic dissemination
- Patchy alopecia is distinctive of secondary syphilis

- Other symptoms could include weight loss and lymphadenopathy
- Malignant syphilis, or lues maligna, is a rare, noduloulcerative manifestation of secondary syphilis. Most contemporary cases have been reported in the setting of underlying human immunodeficiency virus infection

Pearls for Urgent Care Management and Considerations for Transfer

- The lesions of secondary syphilis heal in 2–10 weeks, with or without treatment. If left untreated, up to 25% of patients will relapse within the first 2 years
- Ocular screening (eg, slit lamp examination) is advised for patients with suspected or proven syphilis

Acknowledgment: Images courtesy of VisualDx.