



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.

A 21-Year-Old Male with Foot Pain



Case

A 21-year-old male presents with pain after dropping a piece of furniture on his right foot. He is physically able to bear weight during the assessment, though his pain is evident and he is unsteady when shifting his weight to the injured foot.

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

**Differential Diagnosis**

- Compartment syndrome
- Cuboid fracture
- Lisfranc fracture dislocation
- Medial cuneiform fracture

Diagnosis

The patient sustained a Lisfranc fracture dislocation. The x-ray reveals misalignment of the second metatarsal tarsal joint with calcification fragments adjacent to the base of the second metatarsal.

Learnings

- Injuries result most commonly from a crush injury or motor vehicle accident
- Ligamentous injuries can occur without fracture or gross malalignment, but may result in instability on weightbearing. MRI should be considered even if x-rays are normal
- Appearance typically shows widening at the base of the 1st and 2nd metatarsals (or the more lateral proximal metatarsals) >2.5mm
- The most common type is homolateral, as in this case, in which all of the metatarsals are dislocated to the same side
- The “flake sign” (the small fracture fragment adjacent to base of the second metatarsal) is a classic sign for underlying Lisfranc injury

- To avoid missing a Lisfranc injury:

- Obtain x-rays on all patients with foot pain and swelling
- If a fracture is seen at the proximal metatarsal, suspect Lisfranc injury
- If edema persists for 10 days after the injury, suspect Lisfranc injury

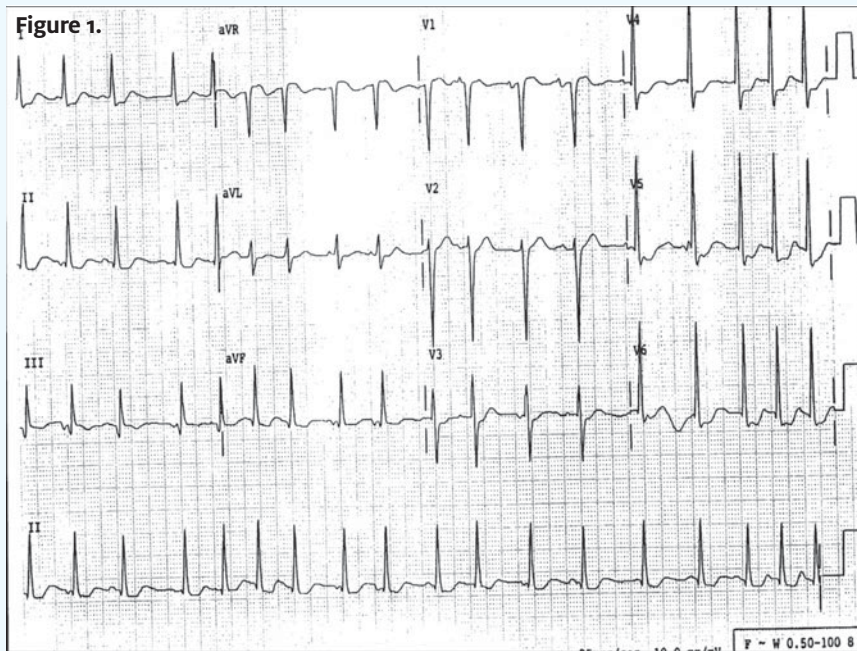
Pearls for Initial Management and Considerations for Transfer

- Early diagnosis is essential for maintenance of function
- Initial management in the urgent care setting includes immobilization and instructions for the patient to avoid weight-bearing.
- The decision to treat Lisfranc fracture dislocations surgically vs nonsurgically is controversial
- Patients with a diagnosis of Lisfranc injury should be sent for immediate referral to the emergency department or orthopedist
- Disproportionate pain may be the sentinel indication of a Lisfranc injury. With a negative x-ray and concerning symptoms, splint ‘as if’ there were an injury, then ensure rapid follow up and consider advanced imaging

Acknowledgment: Image courtesy of Teleradiology Specialists.



A 73-Year-Old Man with a 2-Week History of Palpitations



Case

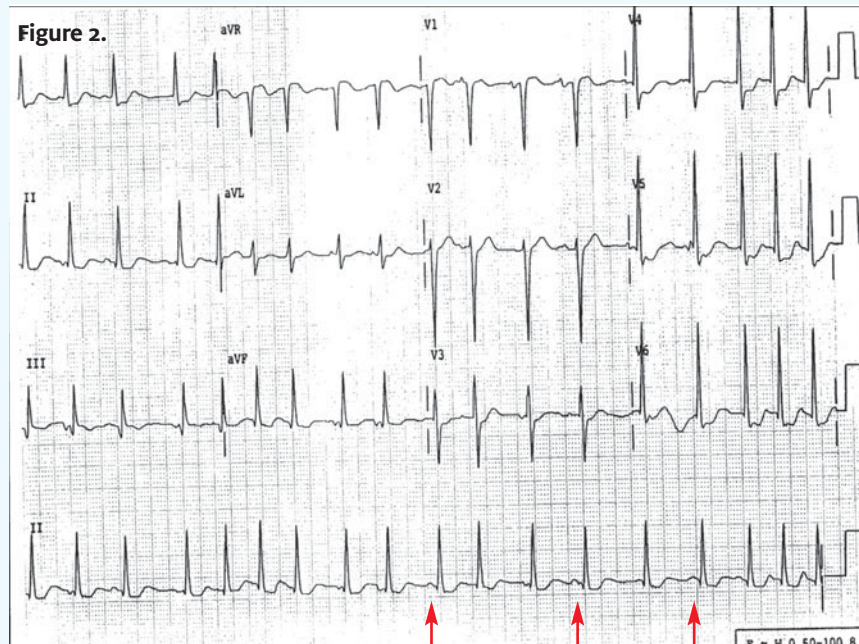
The patient is a 73-year-old male smoker who complains that he has had intermittent palpitations for the past 2 weeks. He denies chest pain, diaphoresis, fever, or dizziness. He uses home oxygen, 2 L/min, but denies any new shortness of breath.

Upon exam, you find:

- **General:** Alert and oriented x 3
- **Lungs:** Scattered minimal wheezing, which is symmetric
- **Cardiovascular:** Regular and tachycardic without murmur, rub, or gallop
- **Abdomen:** Soft and nontender without rigidity, rebound, or guarding
- **Extremities:** No pain or swelling, pulses are 2+ and equal in all four extremities

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

THE RESOLUTION

**Differential Diagnosis**

- Supraventricular tachycardia
- Atrial fibrillation
- Multifocal atrial tachycardia
- Inferior STEMI

Diagnosis

The ECG reveals an irregular rhythm, but it is sinus. Notice the different p wave morphology. There are some nonspecific ST changes, but no ST elevation concerning for an acute myocardial infarction. The r waves are prominent consistent with left ventricular hypertrophy (LVH). Q waves are present inferiorly, possibly indicating a prior MI. Arrows point to the “multifocal” p waves.

Learnings

- MAT is an atrial rhythm, and not ventricular.
- Complexes are narrow and irregular, but p waves are present, which would not be the case with atrial fibrillation.
- The ST segments are decreased in the anterior lateral leads (V4-6), but this is a nonspecific finding. Comparison to past ECGs and correlation with the patient’s symptoms are important.

- MAT occurs commonly in patients with COPD, and is likely present in our patient, given his history of smoking and the scattered wheezing heard on lung auscultation. It may also occur in patients with coronary artery disease, valvular heart disease, pulmonary embolism, and sepsis.

Pearls for Initial Management and Considerations for Transfer

- Although the rhythm is benign, the underlying cause may require further evaluation and management (eg, with sepsis or pulmonary embolism or ischemia).
- Return to the bedside and use the history and exam to risk stratify for serious underlying causes of the MAT. Inquire about chest pain, shortness of breath, syncope, dizziness, diaphoresis, fever, and medication or drug use.
- If the rhythm is found incidentally and the patient is asymptomatic/without new symptoms, further evaluation and management can be done on an outpatient basis.
- Compare the ECG with previous ECGs, if available.
- Indications for transfer include suspicion of sepsis, respiratory failure, myocardial ischemia, pulmonary embolism, theophylline toxicity, or consideration of other life-threatening etiology.



A 30-Year-Old Woman with a 'Burning' Tongue

Figure 1.



Case

A 30-year-old woman visited urgent care complaining of a burning sensation on her tongue. At first, she had blamed it on a spicy meal, but the feeling didn't go away and now she feels as though she isn't able to taste food as usual. Looking back, she recalls that over a month ago she noticed a white plaque on her tongue. However, that had disappeared within a day so she hadn't thought much of it.

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**

- Contact stomatitis
- Migratory glossitis
- Erythroplakia
- Lichen planus

Diagnosis

This patient was diagnosed with migratory glossitis, a chronic relapsing–recurring inflammatory/immune-mediated condition of the oral cavity of unknown etiology. Although the tongue is the most common site of occurrence, it can affect other parts of the mouth. It may begin in childhood, but also affects adults, with females twice as likely to be afflicted. Migratory glossitis is seen in approximately 1% to 2% of the population, and often accompanies fissured tongue.

Erythroplakia may look similar, especially in very late lesions when the raised white rim is not evident. However, erythroplakia would not resolve entirely, nor would it migrate over the tongue. Erythematous/erosive lichen planus or other lichenoid lesions

do not tend to migrate, although they may wax and wane in any one area. These lichenoid lesions have fine white radiating striae at their periphery, rather than a linear white border.

Resolution following antifungal therapy would be expected.

Learnings

- Lesional areas are most often asymptomatic, but some patients may complain of a “burnt” or “raw” sensation. Eating hot or spicy foods will increase these symptoms, leading some patients to avoid acidic and spicy foods when the lesions are present.
- Migratory glossitis waxes and wanes and is present for decades.
- Histopathologically, migratory glossitis is characterized by a psoriasiform mucositis; several studies have suggested that the condition is somewhat more frequent in psoriatic patients. Atopic individuals may have an increased prevalence of migratory glossitis. ■