



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 9-Year-Old Girl Who Choked on a Chicken Nugget

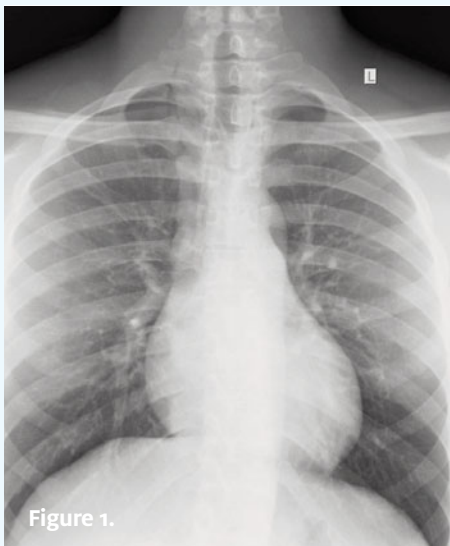


Figure 1.



Figure 2.

Case

The patient is a 9-year-old girl who is brought in by her parents shortly after choking on a chicken nugget. They are concerned because even though she stopped gagging, she complains that it feels “like there’s something stuck in there.”

View the images, ordered to rule out a lodged foreign body, and consider what the diagnosis and next steps would be. Resolution of the case is described on the next page.

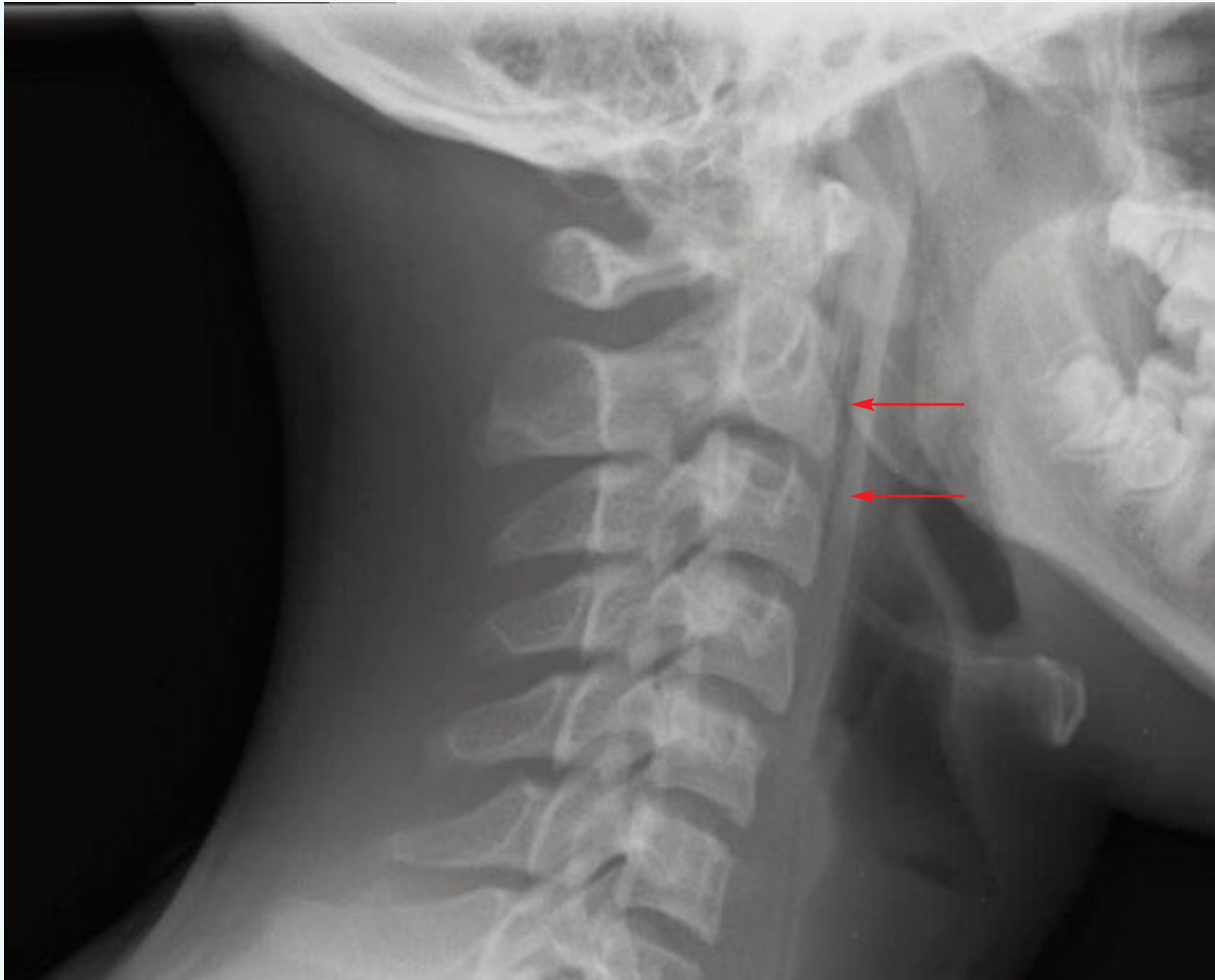


Figure 3.



Figure 4.

THE RESOLUTION

**Differential Diagnosis**

- Allergic reaction
- Hematoma
- Inflammation
- Soft tissue emphysema
- Soft tissue infection

Diagnosis

This patient was diagnosed with soft tissue emphysema, which can cause discomfort—what this patient perceived as a foreign body sensation. In this case it arose from pneumomediastinum tracking into the neck soft tissues (confirmed on the subsequently performed chest radiograph).

Learnings/What to Look for

- Streaky hypodensities in the soft tissues of the neck compatible with gas

- This was likely secondary to raised intrathoracic pressure from coughing after choking on food. Other possibilities for soft tissue emphysema include penetrating trauma and infection with a gas forming organism

Pearls for Urgent Care Management and Considerations for Transfer

- Transfer to the ED for consideration of CT imaging to evaluation for perforation, Boerhaave's syndrome
- If the patient is hemodynamically unstable, start IV access and IV fluid resuscitation while awaiting transfer

Acknowledgment: Images courtesy of Teleradiology Specialists.



A 73-Year-Old Woman with a 12-Day History of Palpitations

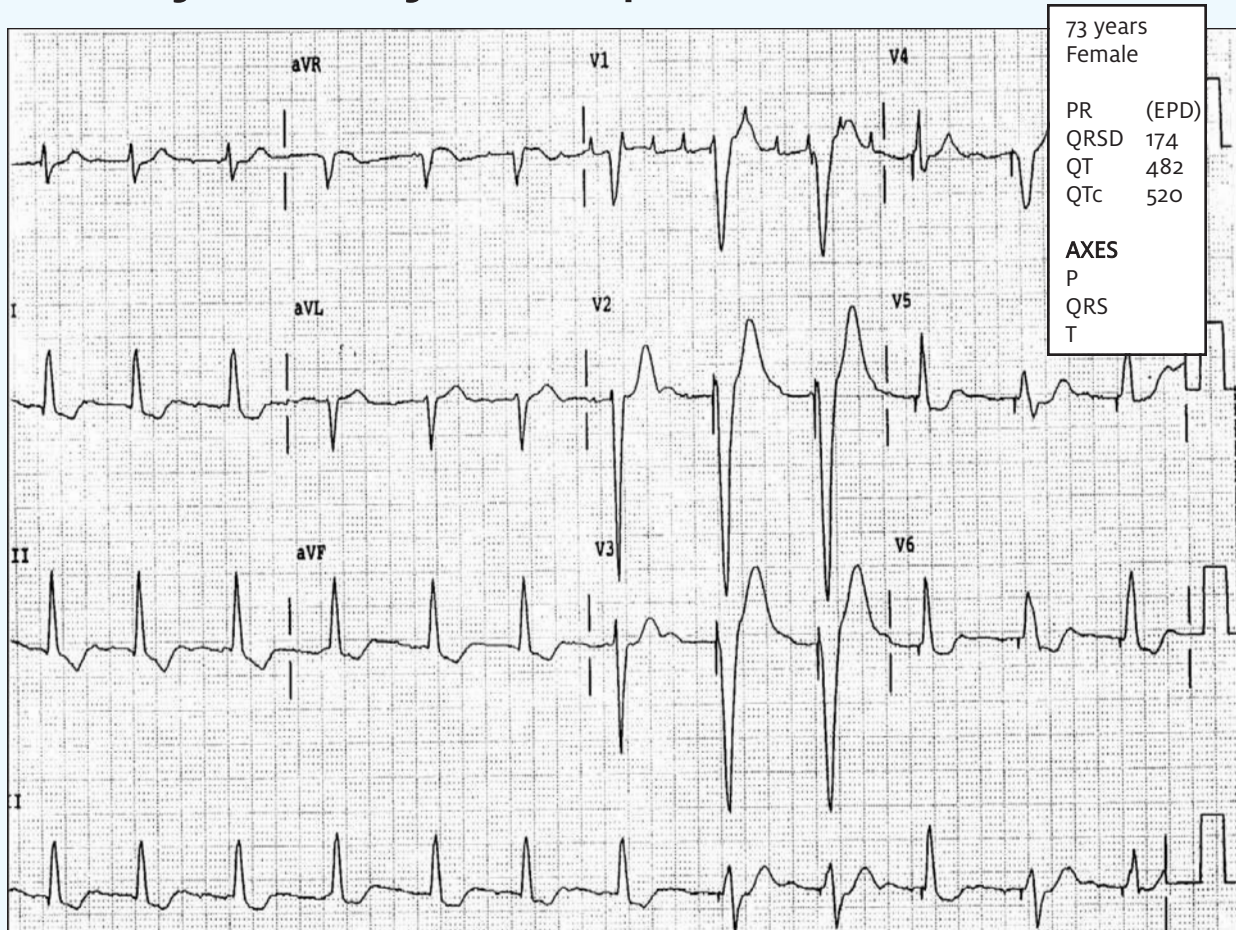


Figure 1.

Case

The patient is a 73-year-old woman who presents to the urgent care center with palpitations she says she first noticed 12 days ago. There is no associated chest pain, shortness of breath, abdominal pain, or paresthesias. The patient states she takes warfarin, with recent INR of 2.2. Her personal medical history includes atrial fibrillation, and there is a history of heart disease within the family.

Upon examination, you find:

- **General:** A&O, NAD, WNW
- **Lungs:** CTAB
- **Cardiovascular:** RRR without m,r,g
- **Abdomen:** Soft and NT, without r/r/g
- **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

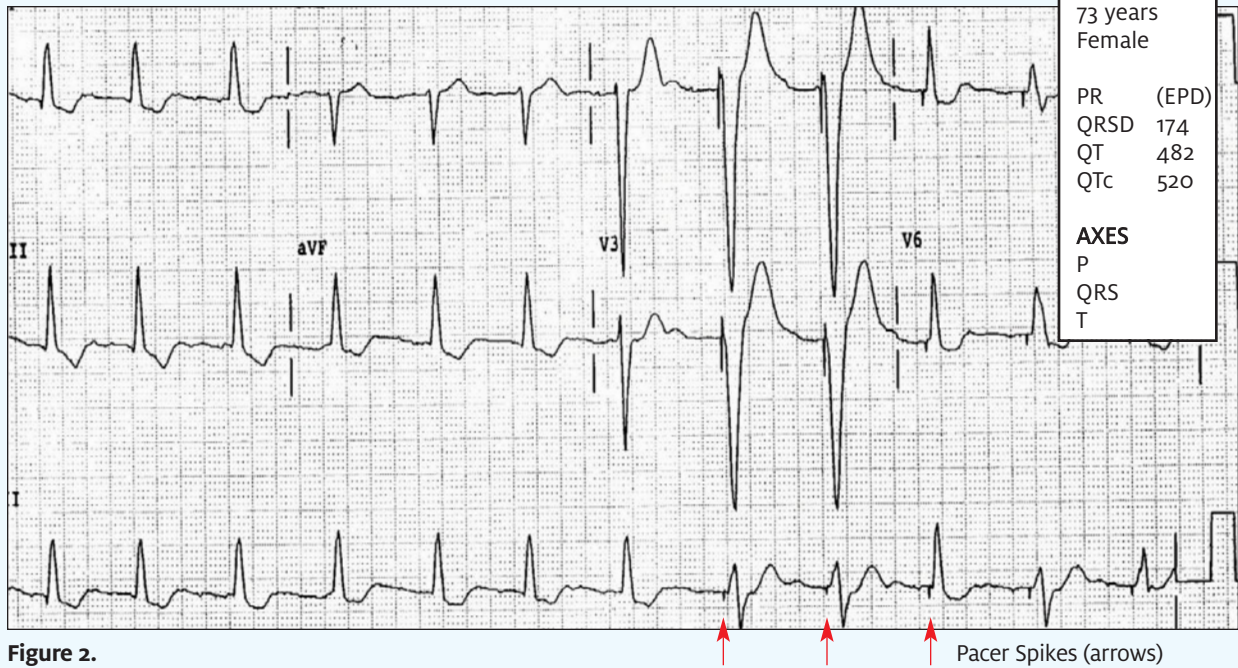


Figure 2.

Differential Diagnosis

- Atrial flutter with intermittently paced beats
- Inferior STEMI
- Wolff Parkinson White
- Third-degree AVB
- Sinus bradycardia

Diagnosis

This woman was diagnosed with atrial flutter with intermittently paced beats.

The ECG reveals a regular rate of approximately 70 beats per minute. Sinus bradycardia is a rate <60 beats per minute. There is no evidence of ST elevation in the inferior leads (II, III, aVF).

The ECG of Wolff Parkinson White reveals a gradual upsloping of the initial reflection of the QRS complex, called delta wave, and additional ECG finds may include a shortened PR interval (<120ms), a widened QRS complex, and ST/T wave changes; these changes are not present on this ECG.

In third-degree AV block, there is dissociation between atrial and ventricular depolarizations; again, not present here.

This ECG shows pacer spikes consistent with an intermittently paced ECG with an underlying rhythm likely atrial flutter, as evidenced by flutter waves in leads V1 and V2.

Learnings/What to Look for:

- Pacer spikes may occur with every beat or be “demand” (ie, present only when the pacemaker senses a need to fire, as

present in this ECG; see the lead II “rhythm strip” at the bottom of the ECG)

- Atrial flutter is a regular rhythm and often present in patients with a history of atrial fibrillation
- The “saw tooth” pattern is best seen in leads II and V1. These are the atrial depolarizations and are usually blocked 2:1, leaving a rate which is often 150
- As with atrial fibrillation, atrial flutter confers a risk of CVA, so the need for anticoagulation should be considered

Pearls for Urgent Care Management and Considerations for Transfer

- Establish the presence of a pacemaker with the patient and compare with an old ECG
- If the patient has an automatic implantable cardiac defibrillator (AICD) and there are intermittent shocks occurring, it will need to be emergently interrogated in the ED or with their cardiologist
- In patients with palpitations, chest discomfort, shortness of breath, diaphoresis, weakness, or dizziness and if present, consider emergent ED referral to evaluate for ischemia/infarction or electrolyte abnormalities
- Asses vitals for signs of hemodynamic instability such as tachycardia, hypotension, dizziness, or confusion
- If there is concern for ischemia, transfer to the ED for emergent evaluation



A 50-Year-Old Farmer with Flu-Like Symptoms

Figure 1.



Case

The patient, age 50, is a farmer who presents with flu-like symptoms—fever, chills, productive cough, myalgia, and pleuritic chest pain that developed over a few weeks. What worried him most, however, was a crusted lesion on his arm that was a large verrucous scaly plaque.

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**

- Blastomycosis
- Coccidioidomycosis
- Tularemia
- Histoplasmosis

Diagnosis

This patient was diagnosed with blastomycosis, also known as Gilchrist disease and North American blastomycosis. By any name, it is an infection caused by the dimorphic fungus *Blastomyces dermatitidis*, a soil organism endemic to much of North America, though other foci have been reported in southern Africa, the Middle East, and India.

Learnings

- Blastomycosis is endemic to the midwestern, north-central, and southeastern parts of the United States
- Infection can involve almost any organ in the body, although the most commonly involved sites are the lungs, followed by the skin, bones, and genitourinary tract
- Infection can manifest acutely as a flu-like illness or pneumonia, or with a more indolent chronic pulmonary infection. Cutaneous manifestations can include crusted verrucous or

ulcerated skin lesions which often have irregular borders and range in color from gray to violet

- The incubation period from exposure to onset of pulmonary symptoms is about 3-6 weeks
- Most patients present with cough, fever, sputum production, and chest pain with shortness of breath. One-third will have weight loss and night sweats; 1 in 4 will have hemoptysis

Pearls for Urgent Care Management and Considerations for Transfer

- Acute respiratory distress syndrome has been described in blastomycotic pneumonia, although overall it is not that common
- Roughly half of cases can clear spontaneously within 1 to 2 weeks, or progress to a disseminated form that produces extrapulmonary manifestations in other organs, most commonly the skin and bones
- Mortality rates in naturally acquired infections are about 5%, though in immunocompromised patients it is 29%; in patients HIV, it is 40%

Acknowledgment: Images courtesy of VisualDx.