



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 35-Year-Old Man with Chest Pain



Figure 1.

Case

The patient is a 35-year-old male who presents with chest pain, which he reports started after he was hit in the chest with an errant pass during his son's basketball practice.

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

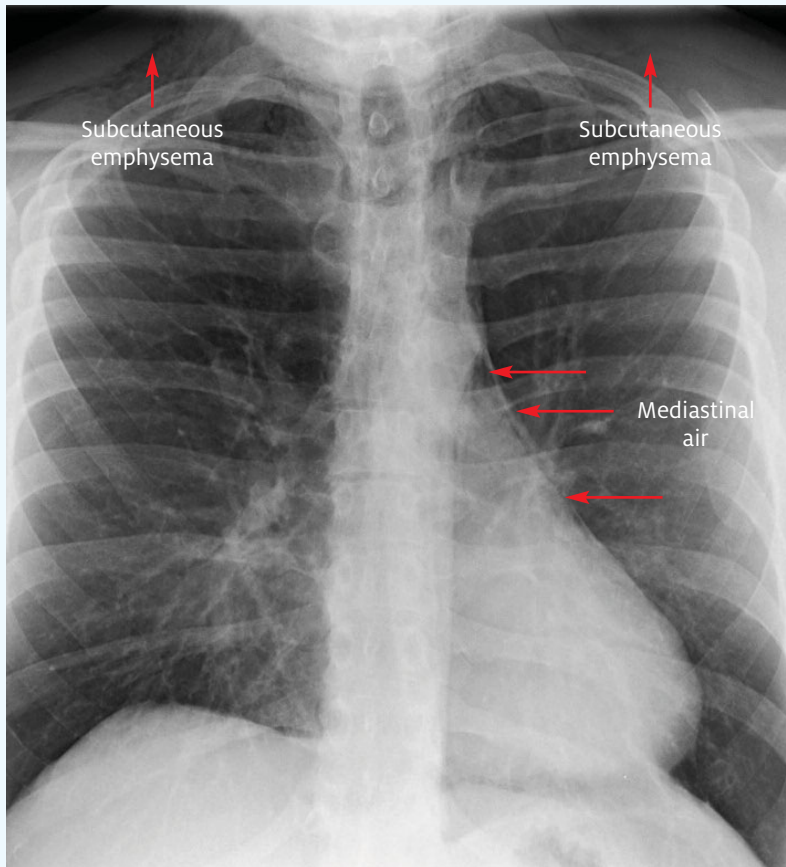


Figure 2.

Differential Diagnosis

- Rib fracture
- Pneumothorax
- Pulmonary contusion
- Subcutaneous emphysema
- Tracheobronchial laceration

Diagnosis

The patient was diagnosed with subcutaneous emphysema.

Learnings

- Subcutaneous emphysema occurs when air or gas is trapped in the subcutaneous layer of the skin
- Blunt or penetrating trauma is the most typical cause of subcutaneous emphysema

- Other potential precedents include ruptured esophagus, bronchial tube, or a malformed lung
- Common symptoms of subcutaneous emphysema include inflammation in the neck area, chest pain (as in this patient), neck pain, difficulty swallowing, wheezing, and breathlessness

Pearls for Urgent Care Management and Consideration for Transfer

- Streaky lucency in soft tissues at the base of the neck represents air in the subcutaneous tissues
- Clinically, spontaneous emphysema is felt as crepitus and, if extensive, may cause soft tissue swelling and discomfort
- Gas can arise from internal sources, external trauma, or gas-forming organisms. In this case, it arose from pneumomediastinum (also visible on this image)



A 60-Year-Old Man with a 2-Year History of Dizziness

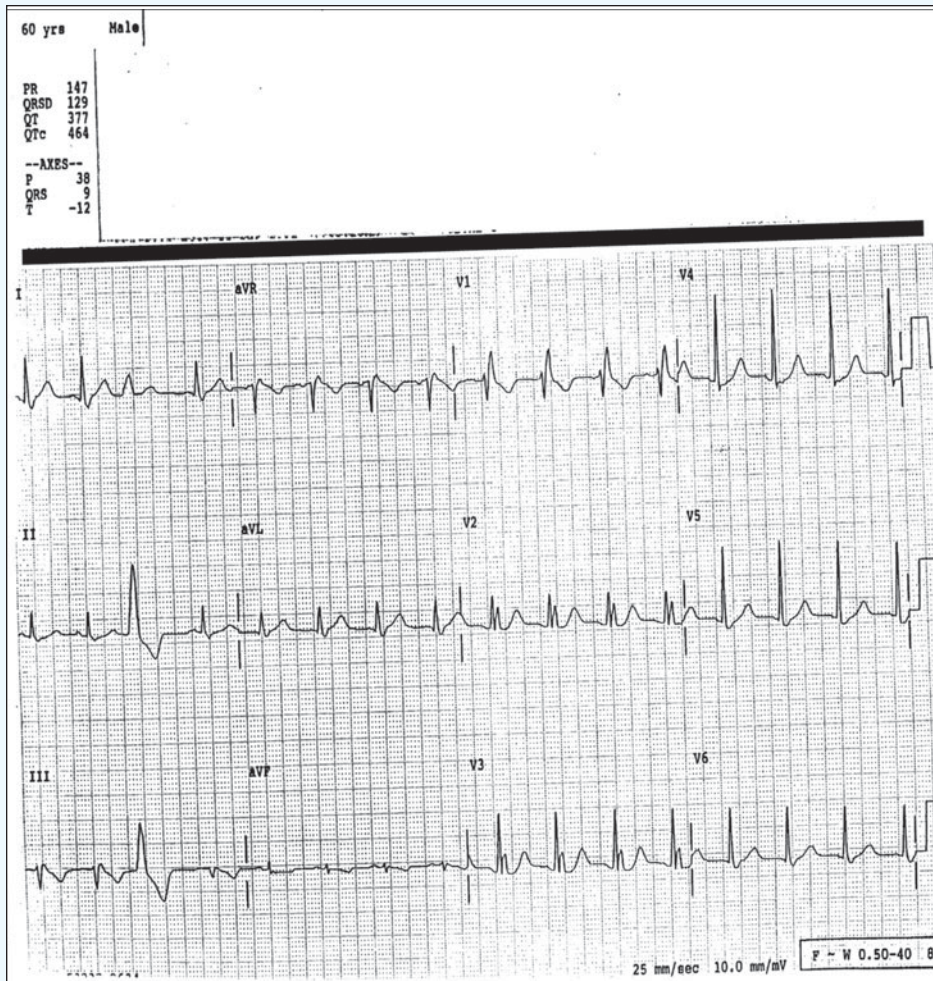


Figure 1.

Case

The patient is a 60-year-old man with a 2-year history of dizziness. He denies chest pain, shortness of breath, diaphoresis, vomiting/diarrhea, or fever.

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

THE RESOLUTION

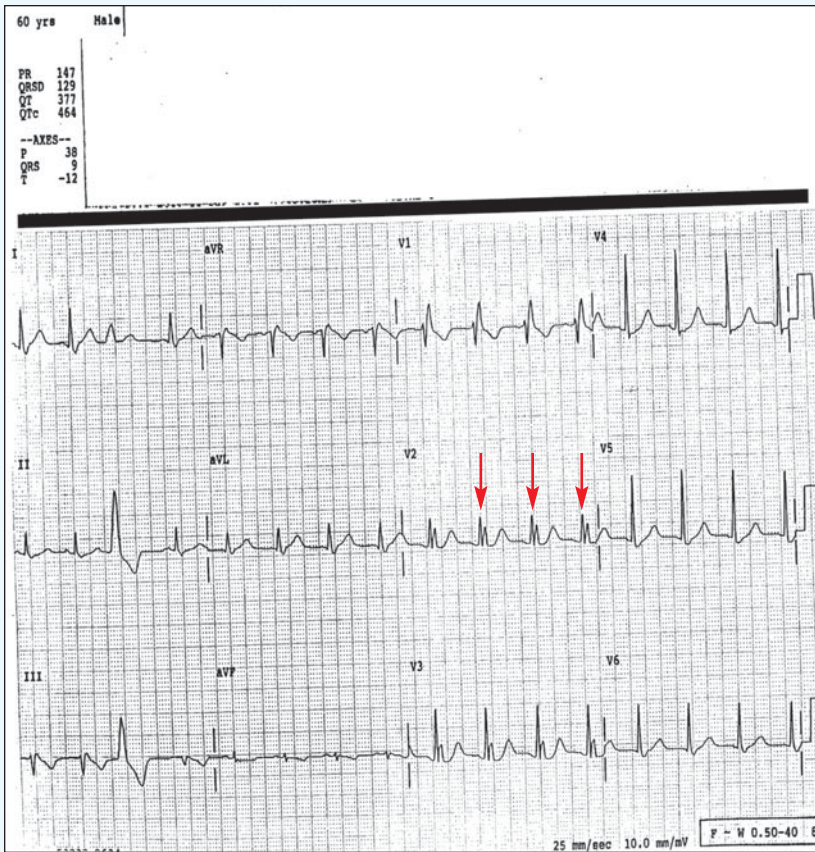


Figure 2.

Differential Diagnosis

- Brugada syndrome
- Hyperkalemia
- Left bundle branch block
- Right bundle branch block
- Wolff-Parkinson-White

Diagnosis

This patient has right bundle branch block. The ECG reveals normal sinus rhythm with a prolonged QRS complex (normal is 80-120 ms) and an RSR' in the right-sided precordial leads (V1-3), consistent with right bundle branch block (RBBB). There is one PVC.

Learnings/what to look for:

- An RBBB occurs as depolarization is delayed when progressing from the left ventricle across the septum to the right ventricle. The initial part of the depolarization is the left ventricle and the subsequent is the right ventricle

- The ECG changes include a widened QRS complex (>120ms), RSR' in the right precordial leads (V1-3), and a wide and slurred S wave in the lateral leads (I, aVL, V5-6)
- Causes include idiopathic degeneration of the right bundle branch, right ventricular hypertrophy, ischemia, myocarditis, pulmonary embolus, and cardiomyopathy

Pearls for Initial Management and Considerations for Transfer

- Compare with a previous ECG, if available
- If there is concurrent concern for more serious disease such as ischemia or pulmonary embolism, then emergent transfer is indicated
- An incidental finding is common and does not typically require further investigation unless there are concerning clinical features



A 42-Year-Old Man with Skin Petechia and Palpable Purpura on His Legs

Figure 1.



Case

The patient is a 43-year-old man who presents to urgent care with widespread skin petechia and palpable purpura on his legs. He reports these symptoms occurred around 2 weeks after he recovered from an upper respiratory tract infection. In addition, he's experienced fever, diarrhea, and vomiting. He mentions pain in his scrotum, as well.

View the photo (**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**

- Acute meningococemia
- Cryoglobulinemia
- Henoch-Schönlein purpura
- Leukocytoclastic vasculitis

Diagnosis

This patient has immunoglobulin A vasculitis (IgAV, formerly known as Henoch-Schönlein purpura), a necrotizing small-vessel vasculitis of unknown etiology that actually occurs more often in children than in adults. When it does occur in adults, it is seen more frequently in males, white individuals, and those of Asian descent.

Learnings

- IgAV is often characterized by palpable purpura, abdominal pain, arthritis, and hematuria. Adults are more likely to have joint symptoms and renal dysfunction; fever and abdominal pain is most common in children

- Renal involvement, if present, is usually self-limited. Risk of renal failure is higher in adult patients
- IgAV is sometimes preceded by an upper respiratory infection
- Episodes can be expected to last from 3 to 6 weeks

Pearls for Urgent Care Management and Considerations for Transfer

- Most cases of IgAV will resolve spontaneously; as such, treatment is symptomatic
- Patients should be advised to drink more fluids, get bed rest, and elevate affected areas if lower extremities are involved
- Use of steroids and/or immunosuppressors is controversial, but may be considered with severe gastrointestinal or renal manifestations