Left Arm Pain, Numbness, and Weakness

40-year-old woman presents to the urgent care clinic complaining of left arm pain with associated numbness and weakness. She denies any injury or trauma, adding that the pain manifested several months ago but has recently progressed. She has already undergone outpatient MRI of her neck; she was told she had some "herniated discs" and would need to see a specialist.

Her medical history is significant for hypertension. On physical examination, the patient appears uncomfortable but in no obvious distress. Vital signs are normal. Tenderness is present at the left trapezius and the left shoulder. Mild weakness is present in the left arm; strength is 4/5 and grip strength, 3/5. Pulses are normal, and sensation is intact.

Available medical records include a report from her recent MRI of the cervical spine. Findings include a moderate left-sided disc osteophyte at the

C6-C7 level and resultant cervical stenosis.

A radiograph of the left shoulder is obtained. What is your impression?

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ECGCHALLENGE

The HEENT exam is normal with the presence of contact lenses. There is no thyromegaly. The lungs are clear in all fields.

Her cardiac exam reveals a regular, rapid rate of 150 beats/min, without murmurs, rubs, or extra heart sounds. The abdomen is soft and nontender without palpable masses. The peripheral pulses are strong and equal bilaterally. There is no peripheral edema.

The neurologic exam is intact.

Laboratory tests, including a complete blood count, thyroid panel, and chemistry panel, are performed. All values are within normal limits.

An ECG reveals a ventricular rate of 149 beats/min; PR interval, 150 ms; QRS interval, 102 ms; QT/QTc interval, 270/425 ms; P axis, 103°; R axis, 78°; and T axis, -18°. What is your interpretation of this ECG?

ANSWER

The correct interpretation of this ECG is atrial flutter with a 2:1 block. Careful inspection of lead I reveals a P wave at the terminal portion of the QRS complex, in addition to the P wave seen with a consistent PR interval of 150 ms. This results in two P waves for each QRS complex. Given the presence of the flutter waves, an accurate assessment of the ST segment is not possible.

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ANSWER

The radiograph shows no evidence of a fracture. However, there is a 2-cm focal sclerotic area noted within the juncture of the humeral neck and head. This finding could represent an enchondroma, a bone cyst, or a bone infarct. Additional imaging, including MRI and bone scan, is warranted, as is orthopedic evaluation. This finding is likely incidental, as the patient's clinical exam is suggestive of a cervical radiculitis referable to the herniated disc in her neck.



GRANDROUNDS

has been reported to cause serious hepatotoxicity and even death. Patients taking these drugs should be informed of possible symptoms of liver toxicity, including fatigue, nausea, vomiting, abdominal pain, and change in color of urine or stools. Particularly in more vulnerable patients, liver enzyme levels should be monitored carefully to confirm the continued safety of antipsychotic treatment.

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