

Nausea, Vomiting, and Worsening Pain

A 75-year-old woman presents to the emergency department with a three-day history of abdominal pain. She does not recall eating anything unusual. She reports having nausea and vomiting and states that her pain is progressively worsening.

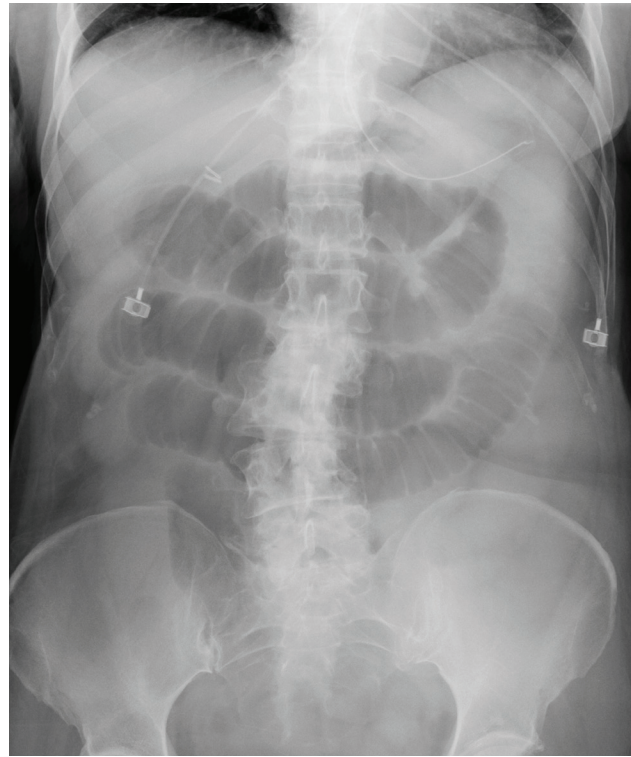
Her medical history is significant for hypertension. Surgical history is significant for previous cholecystectomy and total abdominal hysterectomy.

She is afebrile, and her vital signs are within normal limits. Her abdomen is soft and diffusely tender, with slightly decreased bowel sounds. No rebound or guarding is present. The rest of her physical examination overall is within normal limits. During the exam, she experiences a couple episodes of bilious vomiting.



You order some laboratory studies as well as an abdominal radiograph (shown). What is your impression?

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Nandan R. Hichkad, PA-C, MMSc, practices at the Georgia Neurosurgical Institute in Macon.

alike, especially when mistaken for “infection.”

This patient, like many, was dubious of the diagnosis, pointing out that he had used this same topical medication on many occasions without incident (though not recently). What he didn't know is that it takes repeated exposure to a given allergen to develop T-memory cells that eventually begin to react. This same phenomenon is seen with poison ivy; patients will recall the ability, as a child, to practically wallow in poison ivy with impunity, making them doubtful about being allergic to it as an adult.

Neomycin, an aminoglycoside with a fairly wide spectrum of antibacterial activity, was first noted

as a contact allergen in 1952. It is such a notorious offender that it was named Allergen of the Year in 2010 by the American Contact Dermatology Society.

For the past 20 years, 7% to 13% of patch tests surveyed were positive for neomycin. For reasons not entirely clear, Americans older than 60 are 150% more likely to experience a reaction to neomycin than are younger patients. (It could simply be that they've had more chances for exposure.)

In another interesting twist, the ointment vehicle appears to play a role. A reaction to this preparation is considerably more likely than to the same drug in other forms (eg, powders, solutions, creams). This is true of most

medications, such as topical steroids, which are effectively self-occluded by this vehicle.

Persons with impaired barrier function, such as those with atopic dermatitis or whose skin has been prepped for surgery, appear to be at increased risk for these types of contact dermatoses.

Though there are other items in the differential, the configuration of the papulovesicular rash and the sole symptom of itching are essentially pathognomonic for contact dermatitis. Besides the use of potent topical steroids for a few days, the real “cure” for this problem is for the patient to switch to “double-antibiotic” creams or ointments that do not include neomycin. **CR**

DERMADIAGNOSIS

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ANSWER

The radiograph shows multiple stacked dilated loops of small bowel. The colon does not appear distended. (A nasogastric tube is also present, and there are degenerative changes in the spine.) Such a finding is typically associated with at least a partial small bowel obstruction, since no definite air fluid levels are noted.

The patient was admitted and made *npo*. Nasogastric decompression was started, and general surgery consultation was obtained. **CR**

**ECGCHALLENGE**

of thyromegaly or jugular venous distention. The lungs are clear in all fields. The cardiac rhythm is irregular with a rate of 130 beats/min. There are no murmurs or extra heart sounds audible.

The abdomen is obese and nontender, with no palpable masses. An old surgical scar is evident in the right lower quadrant, consistent with his history of an appendectomy. The lower extremities show no evidence of peripheral edema. Mild discomfort is present with examination of the left ankle. Peripheral pulses are

strong and equal, and the neurologic exam is intact.

An ECG is obtained that reveals a ventricular rate of 131 beats/min; PR interval, not measured; QRS duration, 82 ms; QT/QTc interval, 374/552 ms; no P axis; R axis, 68°; and T axis, 36°. What is your interpretation of this ECG?

ANSWER

This ECG is consistent with coarse atrial fibrillation with a rapid ventricular response and a nonspecific T-wave abnormality. The patient's presentation is strongly

suggestive of lone atrial fibrillation: This was the first incidence, it occurred in the absence of an existing heart condition, and it presented with an abrupt onset of increased heart rate and dyspnea.

Lone atrial fibrillation most commonly occurs in men in their 40s and 50s. It is vagally mediated, occurring during sleep or relaxation and after food and/or alcohol consumption.

The patient was cardioverted to normal sinus rhythm in the ED without difficulty, and follow-up was arranged. **CR**