A 69-year-old woman presents with inflammation near the antecubital fossa of her right elbow that first appeared 4 days earlier. She has a cat but does not recall being scratched or bitten, and she does not recall injuring the area.

HISTORY
About 4 weeks earlier, a similar area of inflammation appeared on the dorsum of her left hand. The inflammation did not respond to a course of antibiotics; however, it spontaneously resolved after about 10 days.

The patient has essential hypertension that is well controlled by low-dose angiotensin-converting enzyme (ACE) inhibitor therapy. She also has mild chronic obstructive pulmonary disease (COPD), which is treated with β-agonists. The COPD is related to long-term smoking (1 pack daily for 40 years, although she smokes less now).

She has a history of gastritis and was treated for Helicobacter pylori infection. Upper and lower endoscopy was last performed 6 years ago. She still has occasional midabdominal pain.

The patient had her annual mammogram 9 months ago. At that time, she weighed 15 pounds more than she does now.

PHYSICAL EXAMINATION
Vital signs are normal. Examination of the head, ears, eyes, nose, and throat reveals no abnormalities. Breasts are without masses or lesions. A few end-expiratory wheezes are audible, but there is no consolidation. Heart is normal. Abdomen is soft and nontender, without obvious masses or organomegaly.

On the right antecubital fossa is a 10-cm warm, red, tender area. In the center of the inflamed area is an easily palpable, exquisitely tender cord that is anatomically consistent with the antecubital vein. Although no active inflammation is evident on the dorsum of the left hand, a hard fibrotic cord is palpable that is consistent with a thrombosed vein.

Which of the following is the most appropriate intervention for this patient?

A. Perform an upper endoscopy.
B. Order mammography and ultrasonography of the breasts.
C. Prescribe a course of oral trimethoprim-sulfamethoxazole for suspected methicillin-resistant Staphylococcus aureus (MRSA) infection.
D. Discontinue the ACE inhibitor and apply topical corticosteroids to the lesion.

CORRECT ANSWER: A

This patient has superficial and migratory thrombophlebitis. Both areas of inflammation were centered around an inflamed vein, and neither was associated with an intravenous needle or catheter, by far the most common cause of such inflammation. The potential causes of this symptom complex include hypercoagulable states and occult malignancy. When underlying malignancy is the cause, it typically has induced a chronic disseminated intravascular coagulation. Superficial thrombophlebitis that arises from malignancy is called Trousseau syndrome, after the physician who first described it more than a century ago. Trousseau noted an association between superficial migratory thrombophlebitis and pancreatic carcinomas. More recent studies have expanded the spectrum of neoplasms involved, but almost all are adenocarcinomas; lung, gastric, and pancreatic are the most common.

Several clues in this patient's presentation point to underlying pathology. She is a long-term smoker and has mild COPD. Bronchogenic carcinoma is a concern here; however, that workup pathway is not among the choices given above. She has a documented history of H pylori infection, which has been shown to increase the risk not only of peptic ulcer disease but also, to a lesser extent, of gastric carcinoma. Moreover, she has episodic, vague abdominal discomfort and recently lost weight. These findings, along with the migratory superficial thrombophlebitis, point to a possible GI malignancy; thus, an upper endoscopy (choice A) is indicated.
Inflammatory carcinoma is caused by an unusual form of skin metastasis in which carcinoma cells invade and block cutaneous lymphatics. This occurs most commonly in melanoma and breast cancer. When the breast is involved, the lesion is referred to as inflammatory breast cancer, and by definition it represents an advanced, metastatic state. Such lesions are usually clinically obvious and involve the breast, not distant tissues. Thus, repeating the mammogram (choice B) is not indicated.

In recent years, the incidence of MRSA infection in the community has increased markedly. The causative organisms in many of these infections are not spillover from nosocomial reservoirs but rather different organisms that have pathogenetic leukocidins. These MRSA strains are resistant to all β-lactam antibiotics. In any patient with an apparent skin infection that does not respond to penicillins or cephalosporins, infection with community-associated MRSA must be considered (choice C). This patient, however, does not have infectious cellulitis; she has a superficial phlebitis that does not respond to antibiotics.

Fixed drug eruptions can also mimic cellulitis. The lesions in such eruptions are pruritic, red, well-demarcated plaques that recur at the same site with each drug exposure, most commonly on the lips and genitalia. Common offending agents include sulfa drugs and NSAIDs. These lesions respond to topical corticosteroids and cessation of the drug (choice D). However, this woman's medications and clinical findings are not consistent with a fixed drug eruption.

**Outcome of this case.** Further investigation revealed occult blood in the patient's stool and an iron deficiency anemia. Upper endoscopy showed diffuse gastritis with intestinalization of the gastric mucosa. An abnormal area, 5 cm in diameter, was seen in the body of the stomach. Biopsy revealed malignant goblet cells infiltrating the stomach wall; these were mucin-positive and identified by pathology as adenocarcinoma of the stomach.

**References:**

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