Postop Patient Reports "Wound Infection"

A week ago, a 56-year-old man had a skin cancer surgically removed. Last night, he presented to an urgent care clinic for evaluation of a "wound infection" and received a prescription for double-strength trimethoprim/sulfa tablets (to be taken bid for 10 days). He is now in the dermatology office for follow-up.

According to the patient, the problem manifested two days postop. There was no associated pain, only itching. The patient feels fine, with no fever or malaise, and there is no history of immunosuppression. He reports following his postop instructions well, changing his bandage daily and using triple-antibiotic ointment to dress the wound directly.

The immediate peri-incisional area is indicated as the source of the problem. Surrounding the incision, which is healing well otherwise, is a sharply defined, bright pink, papulovesicular rash on a slightly edematous base. There is no tenderness on palpation, and no purulent material can be expressed from the wound. The area is only slightly warmer than the surrounding skin.

The probable explanation for the patient's skin eruption is

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a) An allergic reaction to the adhesive on the bandage
b) An allergic reaction to the suture material
c) A postop staph infection in the wound
d) An allergic reaction to one of the ingredients in his triple-antibiotic ointment

ANSWER

The correct answer is an allergic reaction to a contactant, most likely the triple-antibiotic ointment (choice "d").

Irritant reactions to tape adhesive (choice "a") are extremely common. However, the resultant rash would have been confined to the linear areas where the tape touched his skin.

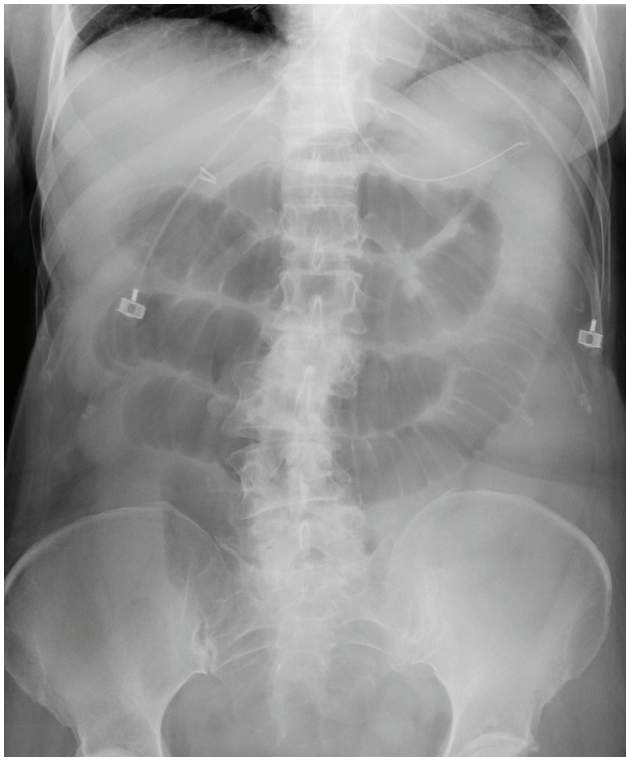
Dissolving sutures, such as those used in this case, can provoke a "suture granuloma"—essentially a foreign body reaction to the suture material (choice "b"). But this would have caused a focal area of swelling and redness, and very possibly a show of pus.

Postop wound infections (choice "c") are also quite common. However, they would not manifest solely with itching in a papulovesicular rash surrounding the wound. Had infection developed, the redness would have been broad-based, with ill-defined margins, and the patient's complaint would have been of pain, not itching. No vesicles would have been seen with bacterial infection.

DISCUSSION

This case illustrates the phenomenon of "treatment as problem," in which the medication the patient applies becomes more problematic than the condition being addressed. Reactions to the neomycin in triple-antibiotic ointment are common but still provoke considerable worry on the part of patients and providers

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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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 pathognomic 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**