

CASE 32-1

A 30-year-old man presents with a 6-day history of a pruritic rash on his right arm. On examination, there are linear streaks of vesicles. It has not improved with the use of 1% hydrocortisone cream.



What is the one most likely diagnosis?

- (A) Atopic dermatitis
- (B) Lichen planus
- (C) Allergic contact dermatitis
- (D) Nummular eczema
- (E) Tinea corporis

The correct answer is (C), allergic contact dermatitis.

Allergic contact dermatitis typically presents with vesicles and papules on an erythematous base in the acute phase. The distribution and configuration of lesions are often useful diagnostic clues. In this example, papules and vesicles are arranged linearly on the arm. This pattern is caused by the broken leaves of poison ivy brushing against exposed skin on the arm of this patient, leaving behind their allergen-containing residue (urushiol). The allergen stimulates an immunologic response leading to this eruption. A history of recent outdoor activities such as camping or hiking may be elicited.

The primary lesions of an acute flare of atopic dermatitis can have identical morphology (eg, vesicles and papules), but would classically be located on flexor surfaces (eg, antecubital fossa) and would unlikely be in a linear distribution. The patient would typically have personal or family history of atopy (eg, asthma, hayfever, and eczema).

Similar to allergic contact dermatitis, lichen planus is generally pruritic and usually is located on the arms. However, the papules of lichen planus differ morphologically. Typically, they are violaceous, flat-topped, scaly or shiny, and have distinct, sharp borders. In contrast to allergic contact dermatitis, the linearity seen in lichen planus is a result of the Koebner phenomenon (isomorphic response). A thorough physical examination may reveal characteristic findings of lichen planus in other anatomical locations. Primary lesions of nummular dermatitis can be identical to those seen in allergic contact dermatitis. By definition, these papules should be a "coin-shaped" configuration. Gradually enlarging annular plaques with leading scale is the classic presentation of tinea corporis.