

QUIZ

Dermatology Series: ‘Could this be an adverse drug reaction?’

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Case history

A 55-year-old man presented to your consulting room with this rash (Fig. 1). He stated that he only noticed it this morning, but his wife stated that she thought it was present the night before. His general health has been good, although recently he has been taking a non-steroidal anti-inflammatory drug (NSAID) for the past 2 weeks for an aching shoulder. He is not on any other medications and he is unaware of having any drug allergies. The rash is quite itchy and feels uncomfortable.

Q.1 Is this likely to be an acute drug reaction?

A drug reaction rash can present in many different ways and always needs to be considered in the differential diagnosis of an acute skin rash. A full drug history needs to be taken including the recent use of antibiotics (in particular a penicillin derivative) or any non-prescription items. The history should also include the possibility of an infectious cause and details of any recent contacts with a similar problem. Depending on the persons circumstances it may also be useful to ask the patient's sexual history to rule out the possibility of a sexually transmitted disease or HIV.

Q.2 How common are drug reactions?

The incidence of drug reactions varies depending on the locality and the recording mechanisms for adverse events. Some reports have shown an incidence of 2–3% for hospital-based patients and 1% for community-

based patients.¹ However, there is general agreement that some drugs seem to have a greater likelihood of producing a reaction than others.² Antibiotics such as amoxicillin, other penicillins, sulfonamides and cotrimoxazole tend to be associated with a greater incidence of drug reactions, as do drugs such as NSAID, gold salts, carbamazepine and allopurinol. A careful drug history should be recorded before prescribing these products in particular looking for a prevalent reaction. The possibility that an adverse reaction may be the cause of a rash needs to be considered in a patient who is taking these agents.

Q.3 How does a drug reaction present?

As an adverse drug reaction can have a ubiquitous presentation, any skin rash can be due to a drug reaction. However, by far the most common presentation is an exanthematous rash (as in Fig. 1). The most common sites tend to be on the trunk. Another type of presentation is seen in Fig. 2. They will usually present within a few days of commencement of the drug (although NSAID and allopurinol will often only present after a number of weeks) and tend to disappear on withdrawal of the drug. Symptomatic treatment for itch may be needed while the rash is fading. Other types of reactions to consider include acute urticarias, angioedema and generalized anaphylaxis.

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Figure 1 An erythematous appearance.



Figure 2 A maculopapular rash of the upper back.

References

- 1 Bigby M. Rates of cutaneous reactions to drugs. *Arch. Dermatol.* 2001; **137**: 765–70.
- 2 Fitzpatrick TB *et al.* *Atlas and Synopsis of Clinical Dermatology*, 4th edn. Mc-Graw-Hill, New York, 2001; 546–71.