

EPIDEMIOLOGY OF ADVERSE DRUG REACTIONS

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Adverse reactions to drugs pose a serious medical problem. The increasing array of drugs at the disposal of physicians requires us to be very aware of untoward reactions which can easily lead to loss of confidence by patients. One classification¹ of adverse drug reactions is:

1. Overdose
2. Side effects and toxicity
3. Intolerance, eg. due to drug interactions, diseased organs
4. Allergic reactions from immune mechanisms
5. Idiosyncratic reactions, ie, unexplained or unusual reactions

The frequency of adverse drug reactions varies with the country and the type of patients. The Boston Collaborative Drug Surveillance Program indicated that adverse reactions occurred in 30% of inpatients and is frequently associated with more than one drug. A study in MRH² revealed that 7.9% of inpatients were due to drug eruptions. The extent of the problem in GP practice is uncertain for obvious reasons. In this issue there is a report of causes and manifestations in 100 cases seen in a general practice.

The key to diagnosis of adverse drug reactions is a good and detailed history. Physicians today have

always to bear in mind the possibility of a drug side effect when disease cannot be explained otherwise. There is no highly specific and sensitive in vitro test for drug allergy. Some drugs like penicillin, local anaesthesia lend themselves to skin testing. However a rather easy diagnostic procedure could be the complete discontinuation of all medication, followed by gradual re-exposure to the suspected drugs. This can be used in the majority of instances and should be done to try to establish where possible, with certainty the offending drug. This can then be communicated to the patient and a Medic Awas Card prepared.

The Medic Awas Card System has proven to be a valuable source of information about the patient allergies. However the information is only as good as what has been supplied. Access to the specialised medical literature dealing with drug side effects is of considerable value and so is information about local prevalences and peculiarities. It is not impossible to envisage the day when all our doctors will need to do is key the suspected adverse reaction into their personal computer for access to a store of helpful information. Improved laboratory testing of adverse drug reaction is also an exciting future possibility.

REFERENCE

1. Current Perspectives in Allergy, edited by Edward J Goetzl, A B Kay, Churchill Livingstone 1982.
2. Study of Drug Eruptions in a Singapore Hospital, Tan Mui Ling, 1976.

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