

Then the patient subsequently gets an infection in which penicillin is the only drug that can be considered effective in the treatment of the illness, and the physician is loathe to readminister the drug to the patient. But if it is a life-threatening illness, he may be forced to do so anyhow.

Here is another instance I think where a reoccurrence of a reaction can occur, knowledgeably and rationally. The physician then, of course, will do what is required to control the reaction.

In terms of the frequency or rates or proportion of patients who have reactions to drugs being attributable to the indiscriminate re-administration of the drug to a patient known to have previously reacted to it, I don't know of any such data.

Senator NELSON. Isn't there an effective antidote for penicillin? Doesn't Schenley Laboratories have it?

Dr. CLUFF. Schenley Laboratories some years ago introduced a drug, the generic name is penicillinase. Subsequently, this drug has lost favor for the simple reason that it, too, is potently antigenic. It can produce an allergic reaction so that the drug is not commonly employed anymore. Furthermore, subsequent control studies have generally revealed that the drug probably has little effectiveness in the control of penicillin allergic reactions.

Generally, the mechanism whereby a physician controls allergic reaction to penicillin today is by the administration of potent pharmacological agents which can treat the manifestations of the allergic reaction without necessarily completely reversing it. Such drugs as the antihistamines, cortisone, and its analogs as well as epinephrine in the treatment of anaphylactic shock but there are no specific antidotes to penicillin reactions.

(3) In our studies on a general medical service, illness due to drugs was the seventh most common cause of hospitalization, ranking ahead of blood, musculo-skeletal, genito-urinary, and cutaneous diseases in frequency of admission.

(4) Among 714 hospitalized medical patients, observed over a 3-month period of time, eight of 36 patients admitted with drug induced illness died and three of 97 patients died with an adverse drug reaction acquired during hospitalization. These reactions were attributable to a variety of different drugs, including both prescription and nonprescription drugs, the ones that I have already indicated. The point in making this, of course, is to emphasize that not only is the problem of trouble with drugs an important cause of admission of patients to the hospital, but it is also an important cause of reactions in the hospital, and it is an important cause of death.

(5) Patients admitted to the hospital with an adverse reaction to a drug were about three times more likely to acquire a reaction to another drug during hospitalization.

When I say another drug here, Senator Nelson, this refers to a drug of a different pharmacological characteristic. The explanation for this is not entirely clear, but suggests a peculiar predisposition of certain patients to the occurrence of ill effects of drugs. What the factors responsible for this are and their identification I think is a matter for further investigation. But patients who have once experienced ill effects from a drug are potently susceptible to the occurrence of ill effects from other drugs that they might subsequently receive.