

2718 COMPETITIVE PROBLEMS IN THE DRUG INDUSTRY

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DETECTION AND PREVENTION OF DRUG-INDUCED BLOOD DYSCRASIAS

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The reluctance of most physicians to report cases of suspected drug-induced blood dyscrasias is due to the difficulty in establishing a definite casual relationship between drug and disease; the evidence for this in most cases is inadequate. Unfortunately, this reluctance may lead to a delay in the recognition of toxic effects of new drugs. For example, cases of suspected chloramphenicol-induced aplastic anemia were observed sporadically soon after the drug was released in 1949, but so few case reports appeared that its potential toxicity was not apparent until 3 years later. By that time 12 individual groups had accumulated 37 cases of chloramphenicol-induced aplastic anemia, enough to warrant publication of a firm, but belated, warning.

In order to prevent similar delays, the Council on Drugs of the American Medical Association established a Study Group on Blood Dyscrasias to act as a clearinghouse for all suspected cases caused by drugs and chemicals.¹ Report forms were distributed, and physicians were urged to report immediately all cases of blood disease in which a drug or chemical might have been of etiological significance. Cooperation has been excellent. Since the institution of this program in 1955, a total of 1,195 cases of blood dyscrasia have been reported in this country alone. The reported cases are tabulated, and a summary is distributed semiannually to all cooperating physicians, to heads of various departments of medical schools, and to medical libraries, medical societies, hospitals, and drug companies.²

Because of the great number of cases and the variety of drugs involved and because of the fact that, in such a summary, well-founded as well as less plausible suspicions may be tabulated together, it is obviously difficult to accept these case reports as scientific proof of the toxicity of a drug. However, when used in conjunction with published reports on the effects of drugs on blood cells and with knowledge of the approximate annual consumption of specific drugs, these tabulations have provided much useful information. They have kept the medical profession aware of the potential toxicity of new as well as of older drugs in common use and have led to specific warnings of the toxicity of the phenothiazines^{3,4} and chloramphenicol.⁵ In addition, it is contemplated that the Study Group will from time to time publish an analysis of all the cases in the Registry in the hope that this will result in a better understanding of the heterogeneous group which has been designated as drug-induced blood dyscrasias.⁶ Only through

Brit. med. J., 1952, 2, 136.

(1961), 1, 1019.

Dameshek, W. (1960). *J. Amer. med. Ass.*, 174, 1853.

Hutchinson, H. E., and Pinkerton, P. H. (1962), *Scot. med. J.*, 7, 96.

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¹ Development and Purpose of Registry of Blood Dyscrasias, *JAMA* 170: 1925-1926 (Aug. 15) 1959.

² Registry on Blood Dyscrasias: Report to Council, *JAMA* 179: 888-890 (March 17) 1962.

³ Blood Dyscrasias Associated with Chlorpromazine Therapy, *JAMA* 160: 287 (Jan. 28) 1956.

⁴ Blood Dyscrasias Associated with Promazine Hydrochloride Therapy, *JAMA* 165: 685-686 (Oct. 12) 1957.

⁵ Blood Dyscrasias Associated with Chloramphenicol (Chloromycetin) Therapy, *JAMA* 172: 2044-2045 (April 30) 1960.

⁶ Huguley, C. M.; Erslev, A. J.; and Bergsagel, D. E.: Drug-Related Blood Dyscrasias, *JAMA* 177: 23-26 (July 8) 1961.