Is it the physician, then, who is largely responsible? In a way he is, for with out his prescription, the drug would not be administered. Certainly, if he regards chloramphenicol lightly, to be dispensed like aspirin, for every minor cold and respiratory infection, he is not without blame. But are there certain mitigating factors? Some say that a person ill is a person to be treated! The urge to make a person comfortable and to cure his illness as quickly as possible is an urge each of us has. It follows then that a good antibiotic of the broad spectrum variety and which can be readily administered is something to be used at every opportunity. This is part of the mores in this affluent society of ours. We have potent medicines; the patient is ill; we must treat! The days of simple herb medicines and of simple galenicals have long since passed. More often than not, the newer synthetics, most of them composed of molecules with benzene rings and nitrogen, NH, NH<sub>2</sub>, or NO<sub>2</sub> groupings—are used, and all of them, it should be said, are potentially harmful.

What then can be done? A few suggestions may be offered: (1) Physicians must be warned, and in no uncertain terms by means of articles, editorials, meetings, announcements; not once, but repeatedly that chloramphenicol is not only a potent antibiotic but apparently an antimetabolite as well, having effects not only on bacteria but on the bone marrow. (2) By some means, whether by regulation or by self-discipline, promiscuous use of the drug should be avoided and its use restricted to impelling circumstances, i.e. for conditions in which no other antibiotic is currently effective. One realizes that this is more easily said than done, knowing the physician's individualistic nature. (3) The patient and the patient's family must be warned, either by the physician or by the druggist that this is a powerful drug; that it should be used only once; that its repeated use may result in serious blood reactions; that it should not be kept in the bathroom cabinet and used again if an apparently similar disorder supervenes. (4) The manufacturing drug house should instruct its detail men, our ubiquitous mentors, not to minimize the dangers of the drug, and to emphasize its value for certain specific conditions, and not for the whole gamut of infectious diseases. The journal advertising could be made more forceful regarding the necessity for guarding against use of the drug indiscriminately, and especially in minor infections, or in repeated courses; or off the bathroom closet shelf.

It might be wise for the patient or his family to have some knowledge of what antibiotic is being used in a given case. Perhaps we physicians might also consider, at least for many of the acute, self-limited infections, the more conservative course (radical by present-day standards) of giving no potent medications at all, but rather such symptomatic care as aspirin, fluids, and the like. After all, the body defenses are usually capable of handling most acute upper respiratory infections.

In any event, something must be done to reduce the incidence of grave insult to the bone marrow produced by some of the antibiotics. The practicing physician would do well to think twice before prescribing a potent antibiotic and to ask himself "Is this drug really necessary?

WILLIAM DAMESHEK, M.D.

Dr. Dameshek. This is one on leukemia I did not put in. Senator Nelson. If you will furnish that to the reporter. Dr. Dameshek. Fine. (The article referred to follows:)

[Reprinted from the New England Journal of Medicine, 277: 1003-1005 (Nov. 9), 1967]

HYPOPLASTIC ANEMIA AND MYELOBLASTIC LEUKEMIA FOLLOWING CHLORAMPHENICOL THERAPY\*—REPORT OF THREE CASES

Mark J. Brauer, M.D.,† and William Dameshek, M.D.‡

A pathogenic relation between aplastic anemia and myeloblastic leukemia has long been suspected. It is well known that certain agents capable of producing

<sup>\*</sup>From the Blood Research Laboratory, New England Medical Center Hospital, and the Department of Medicine, Tufts University School of Medicine (requests for reprints should be addressed to Dr. Dameshek at the Mount Sinai Hospital, 100th Street and Fifth Avenue, New York, New York 10029).

Supported by a fund from the grant (CA 04168-09) from the National Cancer Institute, National Institutes of Health, United States Public Health Service.

†Attending physician and hematologist, New England Medical Center Hospital; senior instructor in medicine, Tufts University School of Medicine.

‡Attending hematologist, Mount Sinai Hospital; professor of medicine, Mount Sinai School of Medicine, New York City.