

amphenicol. The subcommittee has concluded that it might be proper to caution the profession by publishing a reminder concerning the potential ill-effect of this drug on the hematopoietic system. It is hoped that publication of this information will render a service to the medical profession.

NORMAN DE NOSAQUO, M.D.,
Secretary, Committee on Research.

BLOOD DYSCRASIAS ASSOCIATED WITH CHLORAMPHENICOL—(CHLOROMYCETIN) THERAPY

With an increase in the receipt of reports by the Registry on Blood Dyscrasias in which chloramphenicol is associated with the development of a blood dyscrasia, it becomes important once more to review briefly the toxic effect of this drug on the blood-forming organs of sensitive persons. The paucity of recent publications in the American literature should not be construed to mean that the reports of chloramphenicol-induced aplastic anemia some years ago were merely a chance association. There have been numerous reports in more recent years of chloramphenicol-induced aplastic anemia in the foreign literature.¹ Between January, 1953, and January, 1960, the Registry on Blood Dyscrasias has received a total of 223 reports of pancytopenia; of these, 91 were cases in which chloramphenicol had been administered. Of the 91 cases, there were 34 instances in which chloramphenicol was reported as being the only drug given.

Severe reactions to antibiotics occurring in patients between late 1955 and early 1957 have recently been studied in a nationwide survey by Welch and colleagues² of the Food and Drug Administration, Department of Health, Education, and Welfare. This study reported on 31 patients with aplastic anemia associated with chloramphenicol administration, of whom 23 died. Of these 31 cases, only 8 had been reported to the registry. Although some of these patients may have received chloramphenicol in the presence of a developing aplastic anemia, this explanation seems improbable. It is important to note that, in the survey of the FDA, few cases of aplastic anemia were associated with the administration of penicillin, streptomycin, the tetracyclines, or a sulfonamide.

The Subcommittee on Blood Dyscrasias recognizes that chloramphenicol is a valuable and important addition to a physician's armamentarium. This is particularly true since it has been shown that certain strains of staphylococci resistant to penicillin and the tetracyclines are sensitive to chloramphenicol. The manufacturer has repeatedly directed the attention of the medical profession to the need for judicious use of the drug by a warning statement in the labeling and advertising of the product. Although the warning statement specifically cautions against the indiscriminate use of the drug or against its use for minor infections, an examination of the reports received by the registry reveals that the drug has been used in such conditions as upper respiratory infections, including the common cold, bronchial infections, asthma, sore throat, and tonsillitis, miscellaneous urinary tract and ear infections, undiagnosed low-grade fever, and even disseminated lupus erythematosus, gout, eczema, malaise, and iron deficiency anemia. It is incumbent upon a physician when he prescribes chloramphenicol that he carefully weigh the need for the drug in relation to the risk of possible serious toxic effects.

Although the subcommittee recognizes that chloramphenicol is a valuable antibiotic, it is also the opinion of the subcommittee that there is no longer a reasonable doubt that chloramphenicol may cause aplastic anemia. Periodic blood cell counts may be of some help; however, they cannot be relied on to detect signs of marrow toxicity sufficiently early so that chloramphenicol administration can be discontinued before an irreversible aplastic anemia develops. Therefore, judicious use of the drug must be the rule, and it should not be used prophylactically, in trivial infections, or in infections in which other, less dangerous antibiotics may be used effectively.

¹ (a) Visconti, P.: Sulla mielosi aplastica globale da cloramfenicolo: Contributo clinico, *Riforma med.* 70:1043-1046 (Sept. 15) 1956. (b) Cable, J. V., and Reid, J. D.: Jaundice and Aplastic Anaemia Following Chloramphenicol Therapy, *New Zealand M. J.* 56:532-535 (Oct.) (c) Shaw, R. G., and McLean, J. A.: Chloramphenicol and Aplastic Anaemia, *M. J. Australia* 1:352-359 (March 16) 1957. (d) Louwette, R., and Lambrechts, A.: La toxicite sanguine du chloramphenicol, *Rev. med. Liege* 12:10-16 (Jan. 1) 1957. (e) Madsen, N. O.: Anaemia aplastica fremkaldt af chloramphenicol, *Ugesk. laeger* 119:489-491 (April 18) 1957. (f) Slamone, L.: Sull'emopatia da CAF, *Riforma med.* 71:494-498 (March 4) 1957.

² Welch, H.; Lewis, C. N.; Weinstein, M. I.; and Boeckman, B. B.: Severe Reactions to Antibiotics: Nationwide Survey, *Antibiotic Med.* 4:800-813 (Dec.) 1957.