

also been boxed and placed at the head of the listing within the PDR, the Physicians' Desk Reference, and I included a sample page for illustration.² This has been consistent since this time. The type of warning which they have is exactly the same from year to year.

It is placed at the head of the listing.

Senator NELSON. What is the date of the warning on the Thermofax page of the Physicians' Desk Reference you have submitted?

Dr. WESTON. This is 1963. I checked with the latest edition and it is exactly the same.

Senator NELSON. Thank you.

Dr. WESTON. The causal relationship between Chloromycetin and blood dyscrasias, especially aplastic anemia, was clearly set out in the literature in the 1950's and 1960's. And here I make reference to Dr. Best's statement which I have included for evidence,³ which indicates that between the period 1953 and 1964 there were 408 recorded cases who were known to have received chloramphenicol during the year preceding a non-neoplastic depression of blood cell formation; of these 298 were U.S. reports, 25 were published in the literature and 273 were not, plus 110 foreign reports of which 70 were published and 40 were not. The registry also contains one United States and 65 foreign literature cases which were not covered in their review and notes that there have been additional published case reports which do not appear in any review or in the registry. I already indicated, of course, that a voluntary registry of any kind cannot be statistically considered to be of very much significance.

The accuracy of information in the registry is dependent upon the initiative of the physician in reporting such cases, evaluation of the validity of such cases and upon thorough search for such cases within the literature. This may be augmented by search within accurate statistical reporting, including review of death certificates. This was done in the California statistical report. However, as was indicated by testimony in the California Senate proceedings published in January of 1963,⁴ (1) with the Senate of the California Legislature proposing the exclusion of Chloromycetin from the therapeutic regime of physicians within their State initially, and subsequently proposing its use only in hospital admitted cases, a thorough followup of a relatively large number of cases by at least one physician has indicated that deaths subsequent to Chloromycetin therapy, which clinically and pathologically may have been due to blood dyscrasia, were masked within the statistics either intentionally or unintentionally as related blood conditions such as leukemia, spontaneous cerebral hemorrhage, or gastrointestinal hemorrhage, and, while this states unequivocally that chloramphenicol has been implicated in more reports to the registry than has any other single drug, this cannot, therefore, be quantitated to represent the total incidence of untoward reaction.

The estimated risk from exposure to Chloromycetin is statistically outlined in the following table taken from a comprehensive study of the drug by the California Department of Public Health requested

² See attachment No. 1, p. 2496, *infra*.

³ See attachment No. 2, p. 2497, *infra*.

⁴ "Particularly Chloromycetin, a Study of Antibiotic Drugs." Report of California Senate Fact-Finding Committee on Public Health and Safety, January 1963.