

COMPETITIVE PROBLEMS IN THE DRUG INDUSTRY 15427

The development of pathogenic bacterial resistance to antimicrobial drugs has been a serious problem in the United States since the development of penicillin resistant staphylococci in the 1950's. In the 1960's resistant strains of meningococci appeared, causing meningitis in members of the Armed Forces. Patients with bacillary dysentery in various parts of the world were found to harbor strains of Shigella resistant to several antimicrobial drugs. In the late 1960's the epidemic of Shiga dysentery in Central America was caused by Shigella resistant to chloramphenicol and other antimicrobial drugs. In the 1970's a typhoid fever epidemic in Mexico was found to be due to Salmonella typhi strains resistant to chloramphenicol. Recently, in the United States and Egypt cases of meningitis due to Hemophilus Influenza strains resistant to ampicillin and penicillin have been reported. In 1975, physicians at the U.S. Naval Medical Research Unit No. 3 in Cairo, Egypt, reported for the first time isolating chloramphenicol resistant Salmonella paratyphi-A from a patient admitted with chronic enteric fever.

The increasing prevalence of drug resistant strains of bacteria is, in part, apparently related to the widespread use of antibiotics and other antimicrobial agents. This use is due to a considerable extent to irrational prescribing by physicians, irrational dispensing by pharmacists where they are permitted to dispense antibiotics without a physician's consent and to the underlying promotional practices by the drug companies that encourage irrational prescribing and dispensing.

It is within the context of the worldwide problem of increasing drug resistance that I want to discuss the recent Shiga dysentery epidemic in Central America and the typhoid fever epidemic in Mexico. In both cases the causative organisms were resistant to chloramphenicol, a fact of great importance, particularly in the Mexican epidemic.