

are shown in Fig. 2. A period of thirty minutes was allowed between the determination of each output curve. Stimulation of the splenic nerves during the second (Fig. 2B) and third (Fig. 2C) determinations produced much less noradrenaline in the perfusates, an effect which was most marked at the highest frequency of stimulation and may arise from exhaustion of the transmitter, as suggested by Haefely & others (1965).

Between 0.5 and 2.0 c/s the concentration of noradrenaline in the splenic perfusate during stimulation of the sympathetic nerves to the dog spleen is proportional to the frequency of stimulation employed. When the frequency of stimulation is raised from 2 to 5 c/s the concentration of noradrenaline is increased but not markedly so. In the cat this maximum lies between 4 and 8 c/s but the calculated output of noradrenaline per stimulus for the range of 0.5 to 2.0 c/s is quantitatively the same as in the dog. Thus the dog and cat spleens behave similarly in the amount of noradrenaline released by stimulation of the sympathetic nerves in the presence of phenoxybenzamine and cocaine. But, when the splenic nerves are stimulated in the absence of phenoxybenzamine and cocaine and the response of the spleen is assessed by measuring the increase in inflow pressure, maximum responses occur between 5 and 10 c/s. This response is more related to the concentration of noradrenaline in the perfusate than to the calculated output of noradrenaline per stimulus.

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Reference

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Book Review

Drill's *PHARMACOLOGY IN MEDICINE*. 3rd edition. Edited by Joseph R. DiPalma. Pp. xiii + 1488 (including index). McGraw-Hill Publishing Company Ltd., Maidenhead, Berks, 1965. 180s.

Increasing specialisation within specialties is reflected in the tendency towards multi-authorship of most textbooks which purport to be comprehensive and authoritative. The obvious advantage of this arrangement is that each section can be contributed by a chosen authority on the topic; the obvious disadvantage could be discontinuity in the quality, quantity and style of the presentations. Much of the onus for the final quality of such a book falls on the editor and Professor Di Palma is to be congratulated on his successful supervision of the 3rd edition of Drill's *Pharmacology in Medicine*.

Drill first appeared in 1954 and was from the beginning a multi-author tome edited by Victor A. Drill. Even the first edition had 81 contributors (one of whom was Joseph R. Di Palma) and it was stated that "It is the aim of this book to present, with proper emphasis in each area, the mechanism of action, the effect on organ systems and the therapeutic uses of drugs presently used in medical practice." The success of the book and the rate of advance in the subject soon made a 2nd edition necessary and this appeared in 1958, still edited by Drill, with the number of contributors increased to 86.

For the 3rd and latest edition, published in 1965, Victor Drill has relinquished the editorship to Joseph Di Palma although he is still associated with the book

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as a contributor. "Pharmacology in Medicine" now comprises 90 chapters occupying nearly 1500 pages (27 of which are taken up by the index) and is written by no fewer than 93 contributors only 35 of whom also contributed to the 2nd edition. "It is written so as to contribute as much knowledge as possible in a one-volume text which is still considered portable." Although a large book it is easily handled and a pleasure to use because of the high standard of production.

Every major topic of pharmacology is covered somewhere in the book, the only surprising omission seems to be a section on Anti-Viral agents. The text begins with an introduction to and brief history of pharmacology (in which the late Sir John Gaddum is referred to as Robert Gaddum) and then goes on to a short account of some quantitative aspects of drug administration and of the analysis of drug effects. There are some useful discussions of an introductory nature on the general principles of pharmacology such as absorption, distribution and fate of drugs. The section on psychotropic drugs includes an attempt to improve on the classification difficulties which exist in this field and it meets with limited success. There is a clear account of the out-moded analeptic drugs. In the section on autonomic pharmacology each contributor is a well-known expert in his field so that the chapters are authoritative and up-to-date. There is a section on water and salt balance which gives a particularly clear account of the diuretic drugs starting, as it should, with a consideration of modern views on renal physiology. The treatment of histamine and the antihistamine drugs is conventional while the chapter on cathartics and laxatives still refers to many old-fashioned drugs. The modern accounts of drugs used in blood disorders are followed by useful chapters on radioactive elements and gases, vapours and dusts including warfare drugs, insecticides, rodenticides and other economic [*sic*] poisons. After a comprehensive treatment of the hormones, the book ends with chapters on drugs used in the treatment of infections and infestations.

As might be expected the chapters are not all uniformly good, some appear to be more soundly-based scientifically than others and the clinical emphasis varies, but this is largely in the nature of the current disparity in the extent of knowledge and application between different fields of pharmacology and therapeutics. All the chapters supply sound basic information which can be supplemented if needed from the bibliographies which are appended. This is a book to which anyone who uses or needs to know about drugs may turn for a concise presentation of modern information.

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