welcome addition to the literature. The book is based on the study of the pancreas in 587 necropsies and an almost complete survey of the literature. The chapters on the developmental anatomy and postnatal changes are comprehensive and the figures given for α and β cells in the islands of Langerhans particularly valuable. The physiology is treated rather briefly and the difference in nervous stimulation of the pancreas on one hand and the salivary glands on the other hand is not mentioned. Dysgenetic cysts (Wegelin’s dysontogenetic cysts) are well illustrated by figures 28 and 29 but figure 27 is more suggestive of fibrocystic dystrophy. Lipomatous atrophy of the pancreas is clearly separated from developmental abnormalities but the atrophy with replacement lipomatosis in fibrocystic disease is not mentioned. The statement that in pancreatic atrophy with lipomatosis there are no changes in other organs will be scarcely accepted by the majority of pathologists. There is an interesting discussion of pancreatic lipomatosis in experimental Coxsackie-virus infection and the observation in a 13½-month-old infant is reported, which suggests such an infection. The discussion of fibrocystic disease is based on 16 cases only and there is unfortunately no separate discussion of the three types described by D. Andersen, particularly of the changes in other organs. Alterations in the pancreatic secretion are well described and together with those observed in other diseases, including the pancreatitis of Bagenstoss, they are discussed under the heading ‘dyschylia’. Among the 16 cases of fibrocystic disease nine had a dyschylia of salivary glands, a statement which one can accept only if minor degrees, such as are common to many other diseases, are included. The absence of dystrophy or atrophy of secretory tissue in such dyschylas of salivary glands is not mentioned. There follows a good description of acute necrosis, acute and chronic pancreatitis and pancreatic changes in a variety of diseases and a very good discussion of the sialoedema. In the description of chronic pancreatitis with fibrosis one may wonder whether some were not examples of fibrocystic dystrophy. An example of lipidosis with involvement of the pancreas is described which appears to be a case of Schüller-Christian’s disease, but in which surprisingly the Smith-Dietrich reaction is reported as positive.

The paper, print and illustrations are excellent, the list of references exhaustive and, so far as the reviewer has noticed, printing errors are only exceptional.

Die Pflege des Gesunden und des Kranken Kindes, 5th ed.
By W. Catel. (Pp. xxiv + 655; 336 figures. DM 42.)
Stuttgart: Georg Thieme. 1956.

The Care of Healthy and Sick Children by Professor Catel is far more than its title indicates; it is in effect an introduction to physiology and medicine for nurses. The fifth edition has been expanded by five pages only to deal with advances of the past few years. At the same time some of the illustrations have been improved and the book will be a source of much pleasure as well as instruction to any German-reading nurse.


The special function of this well-produced and readable monograph is to call attention to gaps which still exist in our knowledge of the pathogenesis of poliomyelitis, especially the pathways of infection. The widespread acceptability of this disease as an infection primarily of the alimentary tract which only rarely involves the central nervous system is due mainly to the accumulation of evidence within recent years following on the demonstration of viraemia in man in the early stages of infection and in cynomolgus monkeys and chimpanzees after feeding virus. The author analyses the data in favour of this point of view in great detail and demonstrates that much of it is equally applicable to a strictly neurotropic conception of the disease. In the course of investigations extending over the past 15 years, the author and his associates have made a long series of histological studies of the peripheral ganglia in experimental animals and have come to the conclusion that the peripheral nervous system of the respiratory and alimentary tracts is the principal route whereby the virus gains access to the central nervous system. He has found that lesions in the peripheral ganglia precede the appearance of virus in the alimentary tract and viraemia, and believes that invasion of the central nervous system is ordinarily by strict axonal pathways. In abortive infections, the disease process probably does not ascend beyond the peripheral ganglia. These investigations are supplemented by detailed investigation of the histological changes in the brain and spinal cord after varying types of peripheral exposure, including direct application of virus to the central end of the divided maxillary branch of the trigeminal nerve, tonsillectomy immediately following application of virus to the tonsillo-pharyngeal region, and simple feeding. It would appear from these researches that axonal transmission is of basic importance in central infection and the results show a strict anatomical localization in the brainstem following such procedures. Many of the early symptoms of the disease in man can be interpreted as due to early involvement of the brain stem by way of the peripheral nerve roots of the region and not as the result of systemic infection of extraneural tissue.

The appearance of virus in the intestinal tract is considered to be due to centrifugal spread along axons towards the alimentary surface, and viraemia to passive reabsorption of virus by way of the portal capillaries of the intestine and thereafter into the general circulation. When viraemia is sufficiently intense, breakdown of the blood neuron barrier of the central nervous system is presumed to occur, resulting in typical lesions in susceptible areas.

In his penultimate chapter, the author reviews the problem of immunization, and as a result of his own experiments and those of other workers in this controversial field, is of the opinion that satisfactory immunity will only be obtained by the use of vaccines composed of attenuated immunogenic strains of virus.

The various sections are illustrated by excellent photomicrographs and lucid diagrams: the bibliography is comprehensive without being overwhelming.