
The appearance of a new journal for clinical chemistry is timely and desirable. The two main topics of the first issue, History of Liver Treatment in Pernicious Anemia, by H. P. Murphy, and, Clinical Lipid Research, by G. Schetler give a splendid representation of what one may expect from this new publication.

M. Spiegel-Adolf, Philadelphia


The author produced in monkeys a tremor similar to the Parkinsonian by lesion in the medioventral part of the mesencephalon. Interestingly when the tremor production was successful, a partial nigral lesion was found. In 13 to 14% of the neurons studied in the opposite motor and sensory cortex and in 2% in the ipsilateral cortex unit discharges were synchronous with the tremor rhythm. The author considers it more probable that the sensorimotor cortex plays an active role in the genesis of the tremor rhythm than that the periodic cortical activity is due toafferent impulses from the shaking muscles. He believes that the tremorogenic impulses are conducted to the periphery by way of the pyramidal tract, because on localized pressure upon the motor region the tremor disappeared in the respective limb, while he was unable to find an activity synchronous with the tremor rhythm in the mesencephalic tegmentum. This reviewer is fully aware of the importance of these difficult, beautifully executed experiments. He hesitates, however, to follow the conclusions regarding the mechanism of Parkinson tremor. The appearance of unit discharges synchronous with the tremor has been observed not only in the sensorimotor cortex, but also in the putamen, pallidum, posterior limb of the internal capsule, nucl. VPL of the thalamus (Lamarre and Cordeau) so that the localization of the postulated pacemaker is uncertain. There exist observations of persistence of postural tremor despite anatomically demonstrable degeneration of the cerebral peduncle (Mettler). On the other hand the tremor may be abolished or diminished by lesions in various parts of the extrapyramidal system. Apparently both pyramidal and extrapyramidal system play a role in the genesis of the tremor.

E. Spiegel, Philadelphia


In most chapters the differential diagnosis is outlined according to groups of diseases, e.g., diseases of the peripheral nervous system, vascular, inflammatory, space taking diseases etc. Some chapters are devoted to certain symptoms, such as headache, vertigo, loss of consciousness, seizures. Final chapters deal with special auxiliary methods of examination (tests of the CSF, electrodiagnosis, EEG). This volume can be highly recommended to neurologists and internists. The numerous, excellent illustrations add to its value. For a new edition it would be suggested to amplify the reference material.

E. Spiegel, Philadelphia

Based on extensive clinical and cinematography studies, the author reaches the conclusion that involuntary movements in disease of the basal ganglia represent an intermediate stage of disintegration of motor function, which in a more complete form becomes dystonia. His striatal syndrome is represented by athetosis proceeding to fixed hemiplegic dystonia, his pallidal syndrome by parkinsonian tremor associated with progressive dystonia in flexion. He believes that gross necrosis of the putamen or (sic) globus pallidus results in the same dystonic postures (page 122). From his experiments on monkeys with pallidal lesions he concludes that the pyramidal system is useless for the organism without the extrapyramidal system (page 130); These conclusions are contrary to the experiences in patients with extensive bilateral pallidal lesions and are probably due to the fact that the author's pallidectomies included large parts of the internal capsule. There are some astonishing statements in this book. On page 11 a connection of the pallida by a suboptic commissure is described; the author still believes in cortical suppressor areas (page 12) although their existence has been disproved by Penfield, B. Meyers and others. Despite these deficiencies the reader will be rewarded by numerous valuable clinical and experimental observations and thought provoking ideas.


In a study of 215 patients with severe depression (290 statistically useable treatments) electroshock was superior in endogenous depressions. Imipramin (Tofranil) is valuable chiefly in endogenous depressions with cyclophrenic symptomatology; it is particularly helpful in the treatment of anxiety, guilt feelings and agitation. The monoamino-oxidase inhibitors, e. g., Iproniazid (Marsilid) or the less toxic Isoar-boxacid (Marplan) that prevent the decomposition of serotonin and noradrenaline are indicated in symptomatic, neurotic depressions characterized by apathy.


In view of the ever increasing number of psychopharmacological drugs and the rather confusing multitude of trade names for identical compounds, this index giving tables of generic names, structure formulas and tradenames is highly welcome and will be useful for psychiatrists, neurologists and pharmacologists.


In the series represented by this volume it is intended to survey the progress of psychiatric clinic and research in the last 30 years. Consequently, those areas are
emphasized which are characterized by new findings or significant changes of concepts. The first part deals with psychologic and psychopathologic problems, psychosomatic studies, psychologic methods and tests. The main body of the volume is devoted to psycho- and somatotherapy. It reflects the increasing importance of therapeutic efforts, and the recognition that has been afforded to psychoanalysis by the official psychiatry. General considerations of modern concepts, anthropologic aspects and reflections on the relationship between psychiatry and philosophy form the last part of this standard work that should prove valuable not only to psychiatrists but also to clinical neurologists.


Over two dozen investigators review in this volume the huge literature on acetylcholine esterase (AChE) and other cholinesterases (ChE) and their role in synaptic and neuroeffector transmission and other biological processes. After presenting the biochemical and physiological background essential to understanding of the primary mechanism of action of these agents, their chemistry, pharmacology, toxicology and therapeutic uses in myasthenia gravis and glaucoma are described in detail. Pharmacologists, physiologists as well as clinical neurologists will find this volume an indispensable source of information.


This monograph deals with the embryology, anatomy, pathology, clinical symptomatology and roentgenology of these interesting tumors. Twelve case reports with surgical results are presented. A significant number of tumors occur in the region of the foramen of Monro where the choroid plexus is sparse. The tumor is predominantly found in females. A total of 100 verified cases are reviewed from other clinics and tabulated. The book is an excellent reference for neurosurgeons interested in cerebral neoplasms.


This is a selection from more than 600 case histories, collected and abstracted by the late Lyman from the literature. These well selected case histories have both historical and didactic value, particularly since they are adequately anatomically controlled. Instructors of clinical neurology will find this collection a useful addition to their teaching material.


The revised 12th edition of this classic text incorporates new vista and will remain an indispensable critical guide in the borderland between medicine and psychology.

The fate of 1200 infants and juvenile persons with head trauma was studied 14 to 40 years after the injuries. The 2nd to 3rd years of life seem to predispose for head trauma due to the beginning increased motor activity. For the disappearance of the consequences of the trauma the pretraumatic personality proved important. Over one half of the persons studied were still gainfully employed. The changes in character depend less on the location than on the severity and diffuseness of the lesion. Lesions in the temporal area worsen the prognosis. Psychogenic posttraumatic reactions or compensation neuroses are absent in infants.


These six authors deal with psychological problems involving the adult patient, the ailing child, and the physician as therapeutist; the strictly psychosomatic viewpoint is avoided throughout. Particular attention is given to anxiety, especially by P. B. Schneider (who fails to mention, though, the psychosurgical methods of therapy). The plight of the silicotics is discussed by M. Lob: the simple people who contract the fatal disease in tunnel work succumb to anxiety upon hearing the diagnosis.


This volume is written by an associate of the Max Planck Institute in Giessen who formerly worked at the Amsterdam Institute for Brain Research. Following a detailed description of the macro- and microscopic anatomy of the hypothalamus including its comparative anatomy, its relation to the hypophysis is discussed in its morphologic as well as functional aspects. Of particular interest is the chapter devoted to the problem of neurosecretion, while the review of hypothalamic function, chiefly following Hess’ distinction of a dynamogenic and ergotropic zone is brief but adequate.


This symposium is devoted chiefly to the methods of clinical examination of psychotropic drugs as outlined by the introductory review by Bente, Engelmeier, Heinrich, Hippius and Schmitt. There follow 29 contributions dealing with E. E. G. studies, humoral changes, effects upon eosinophiles, upon the hemato-encephalic barrier, Jendrassik maneuver, and upon the extrapyramidal system. Among the drugs studied, there were piperazinyl-phenothiazin derivatives, Tofranil, Nitoman, hydrazin compounds, Librium, Reserpin, Orphenadrin, perphenazin sulfoxide, and phenylpiperidylcarbinol. This volume will be of interest not only to pharmacologists but also to neurologists and psychiatrists.

The author contradicts the classic summation theory of pathologic pain and attempts to prove that it is a special function of the interoceptive pain sense. Exteroceptive pain shows a prompt reaction to a stimulus, prompt return of the reacting system to renewed reactivity, spatial limitation of the reaction, slight humoral, pharmacologic or psychic susceptibility. In contrast the interoceptive vegetative pain needs a long lasting stimulus, the reaction is prolonged and diffuse, very susceptible to humoral, pharmacologic and psychic stimuli. Concluding considerations deal with the relationship of pain to anxiety.

E. A. S.


This study is devoted to the effect of repeated blunt traumata upon the skull, its mechanics, morphologic and clinical manifestations in the rabbit, cat and man. Of special interest is the finding that small repeated, successive traumata, that fail by themselves to produce primary morphologic or functional changes, are able to produce permanent cerebral damage due to secondary vascular alterations.

E. A. S.


By alternating studies of sections stained for cells and for myelia sheaths the apparent contradictions between cyto- and myeloarchitectonic of the frontal lobe could be clarified. The development of the frontal lobe is outlined based on onto genetic studies of the relations between gyrations and architectonics. A gradation in the cyto-myeloarchitectonic differentiation of the various frontal areas is demonstrated. These studies should be of interest not only to anatomists but also to physiologists and clinicians.

E. A. S.


After a brief outline of EEG technique, neurophysiology and biochemistry of epilepsy, the author presents the clinical pictures with case histories and related EEG patterns. Special attention is devoted to syndromes encountered in children, e.g., infantile spasms, vegetative attacks and acute convulsive encephalopathy. This book will be useful to neurologists, pediatricians and general practitioners.

E. A. S.


Beginners in the field of neurosurgery, particularly first year residents will find the text a useful introduction. Among the 20 contributors, there are also some North-American (Ray, Scoville, Walker). The publisher has lived up to his high standard by providing excellent illustrations.

E. A. S.

The problems of sensory communications, a meeting ground for engineers, physical scientists and neurophysiologists are discussed in all their manifold aspects by 42 internationally well known contributors. The book is carefully edited by the professor of Communications Biophysics at the Massachusetts Institute of Technology and should serve as a valuable guide to all those interested in this new field.

E. A. S.


This book deals with the integration of neural and endocrine mechanisms covering first afferent nervous and hormonal pathways, integration centers and their afferents and the target organs. Among the processes under neuroendocrine control, particularly the various phases of reproduction, growth, development and metabolic processes are discussed. In the final part the mechanisms involved in stress and its avoidance, color adaptation, hibernation, estivation, diapause, and migration are analyzed. Specialists in the medical as well as in the biological field will benefit from a study of this monograph.

E. A. S.


The whole gamut of inhibitory processes from vagal inhibition to the recently discovered presynaptic inhibition (depolarization of presynaptic terminals) is dealt with in this symposium by international experts. The complexity of inhibitory phenomena is demonstrated by the fact that in some instances they are associated with hyperpolarization, in others with depolarization or with no changes of membrane potential. An inhibitory transmitter in mammalian motor neurons, factor I, an extract of mammalian brain, may play a role, while y-aminobutyric acid does not seem to qualify for a natural inhibitor. This account deserves a careful study by all interested in general neurophysiology problems.

E. A. S.

Caughey, J. E. and Myrianthopoulos, N. C: Dystrophia Myotonies and Related Disorders. Thomas, Springfield (EI.) 1963. 282 p., 64 fig. Price: $ 10.--.

The protean clinical manifestations of dystrophia myotonica and the associated biochemical and radiological findings as well as the genetic and epidemiologic features are critically reviewed. Of interest are recent observations of congenital heart- and other malformations. Related disorders (familial periodic paralysis, Gamstorp’s disease) are included. Besides neurologists, endocrinologists, geneticists, chest physicians and ophthalmologists will find valuable material in this monograph.

E. A. S.


In the report of these conferences held at the Pitie the reader will find a great variety of subjects discussed, e.g., cerebral electrogenesis, relation of cortical unit discharges to the EEG, functional and behavioral aspects of the reticular formation,
evoked potentials in neurosurgery, cerebral "silence", electronic brains, clinical and neurobiological aspects. It is attempted to conceive neural activity in terms of probability. This book should be read by all who wish to arrive at a more critical approach to the problems facing the electroencephalographer.

E. A. S.


This monograph is based on extensive personal studies by the authors in the cat's brain. Besides careful critical evaluation of our present knowledge, interesting new facts are presented, e.g., the existence of regions that do not receive primary vestibular fibers in all 4 subnuclei; a somatotopic arrangement within the projection of Deiters' nucleus to the cord, and a topic arrangement of the projections from the lobus anterior cerebelli and nucl. fastigii to Deiters' nuclei. The anatomic findings are correlated with functional investigations including micro-electrode studies. The extensive literature is meticulously scrutinized, so that nobody interested in the vestibular system should miss a study of this monograph.

E. A. S.


Of the various symposia presented at this Congress the neurologist and neuro-physiologist will find the following of interest: Thermoregulation, arousal, physiology of the retina, optic and vestibular factors in motor coordination, biophysics of peripheral nerve, brain-gonad relationship, regulation of food intake, formation of conditioned reflexes and processing of information in the CNS. There are also numerous individual papers and lectures of great value to the readers of the journal.

E. A. S.

Gellhorn, E. and Laufbourn, G. N.: Emotions and Emotional Disorders. Hoeber Med. Div. Harper & Row, New York 1963. 496 p. Price: $ 12.—. After reviewing nervous integration and the neural substrate of emotions, the authors discuss the physiological aspects of awareness, instinctual drives, learning, perception, cognition, motivation and conditioning, furthermore experimental neuroses, sensory deprivation, stress and various pathological conditions (e.g. hypertension, peptic ulcer, vago- and sympathicotonia). The importance of the hypothalamus and of cortical and endocrine changes associated with its imbalance is reemphasized. The experiences made available by stereotaxic thalamic lesions in man are neglected, otherwise the book provides a wealth of information. E. A. S.


After an introductory chapter dealing with the principles underlying the quantitative aspects of storage and communication of information, basic scientists (particularly neurophysiologists) as well as clinicians will find in this volume a great variety of applications of information theory useful for their special problems.

E. A. S.

The importance of the hydrogen ion concentration for the biology of single cells is one of the fundamentals of biochemistry. This book which attempts an understanding of the function and metabolism of the highest differentiated tissue is certainly of paramount interest to the neurologist and those active in the border lines of neurology. This monograph discusses the influence of hydrogen ion concentration upon the neuronal function, upon the cerebral nervous excitability, the cerebral electrical activity, and the cerebral circulation; the clear illustrations enhance the value of this text.

Mona Spiegel-Adolf


The author outlines the principles and techniques of tomography of the skull and attempts to aid the beginner in the field by describing and illustrating the normal topographic anatomy of the skull on parafrontal, paramedian and horizontal sections. Tomography of the nasal sinuses concludes this useful text.


The author attempts to summarize the results of treatment by mathematical-statistical methods and by catamnestic reexaminations 8—10 years later. Special attention is directed to changes in symptomatology and the social implications of neurotic diseases. The catamnestic studies show that the number of "cures" becomes the smaller the more carefully the patients are examined and the more changes in symptomatology and apparent "cures" are taken in consideration so that the long-range effect of brief therapeutic measures are disappointing.


Based on a large pathologic material the author discusses the frequency of the various pathologic-anatomic changes found in epileptics. Only in 17.5% of the cases examined, the pathologic-anatomic study failed to reveal a cause. Preparoxysmal vasoconstriction is considered problematic. Metabolic changes precede the attacks that start with abnormal electric discharges before changes of the cerebral circulation appear.


For the neurologist the chapter by G. Maeder on the pupil, its malformations, physiology, pharmacology, motor disturbances, pupillometry and pupillography will be of special interest. Other chapters deal with gerontology of the fundus, operations for retinal detachment, and trachoma.

E. S.

This volume contains interesting reviews on biochemical and neurophysiological development of the brain in the neonatal period, on Substance P, a polypeptide of possible physiological significance, anticholinergic psychomimetic agents, benzol quinoline derivates (monamine decreasing drugs with psychotropic action), the effect of adrenochrome and adrenolutine on behavior, and on spreading depression. The specific characteristic of the latter is an increased permeability of the apical dendrites. Motor effects induced by subcortical stimulation are summarized; the production of tremor by stimulation of the mesencephalic tegmentum, however, has been overlooked.

E. S.