Book reviews


From the list of contributors in the introduction to this publication it is clear that the seminar attracted many well-known workers in the field of nuclear medicine. However, probably as a result of the fact that only two of these contributors are working outside the United States, some of the international controversies surrounding the practice of nuclear medicine in the investigation of the central nervous system have been omitted, both from the papers and the reports from the discussion panels. This is especially true in the section dealing with cerebral blood flow measurement.

Part 1 of the proceedings consists of excellent papers reviewing the current thoughts on fundamental issues such as metabolic characteristics of brain tissue, the blood barrier concept, and cerebral spinal fluid dynamics. The report on the discussion at the end of this session brings to light some important practical problems associated with the techniques of isotope cisternography.

Part 2 deals with the radio-pharmaceuticals used in central nervous system investigation. The only really surprising fact in this section is the over-estimation some workers continue to make concerning the usefulness of diffusible isotopes in the investigation of the cerebral circulation, in the clinical situation, despite strong evidence to the contrary.

In considering instrumentation, the papers in Part 3 outline, in a qualitative way, how images are produced and the inherent limitations of the systems employed.

The papers in Part 4 describe methods of measuring cerebral blood flow which can now almost be considered as classical. Very little is discussed concerning the sources of error inevitably associated with attempting to measure regional cerebral blood flow. As has become the custom most discussions focus on the analysis of the results with very little mention of the quality of information accepted at the patient-instrumentation interface. If this information is of poor quality, no amount of sophistication in the data analysis techniques will yield a result which will be of any real worth.

Part 5 is concerned with various imaging techniques and ends with an extremely useful discussion on isotope cisternography and ventriculography.

The clinical applications of the techniques previously discussed are dealt with in Part 6, which includes an interesting paper on non-radiation hazards to the patient of neurological diagnostic techniques.

This publication attempts to present the current thinking, state of the art, and the controversies concerning the investigation of the central nervous system using radio-nuclides. In the main it succeeds admirably. However, a disturbing idea that the clinician alone should be concerned with the application and advancement of nuclear medicine pervades some of the papers. It is clear that the idea that the practice of nuclear medicine is better carried out by a multidisciplinary group has still not been accepted in the United States. Such a situation perhaps lends itself to the preoccupation with the analysis of data to the exclusion of concern over the limitations of the actual measurement. Nevertheless, this book contains so much useful information, which is an obvious result of a great deal of intellectual application to the use of radioisotopes in neurological science, that it must be considered a very worthwhile addition to the literature already written on the subject, and a book that every worker in the field will want to read.

J. O. Rowan


Constantin von Monakov was born during the Crimean war in 1853 and died in 1930. As a child of 4 he lost his mother, whereupon his father left the children to seek relief from his grief in the main centres of European culture. Constantin's relationship with his father was never a happy one. The father emerges from the book as a cold, distant person (two of Constantin's siblings became schizophrenics) who vehemently opposed his son's entry into medicine, and from then on the rupture between son and father appears to have been nearly absolute. If a late reconciliation took place it is not mentioned in the book.

Monakov was at first unlucky in his attempts to establish himself in private practice, but in 1878 he became assistant at the asylum in St. Pirminsberg, and there he began his fruitful scientific career with the important discovery that the external geniculate body degenerates after removal of an occipital lobe. He continued to contribute much to the normal and pathological anatomy of the nervous system, trained many future outstanding research workers (Minkowski was one of them), was co-founder of the international 'Brain Commission', and the striae acusticae as well as the rubrospinal tract bear his name.

He was far off the mark in his belief that the choroid plexus and the ependyma play an important part in the prevention (or origin) of mental disease, but who among his contemporaries did not favour this or that part of the brain as the seat of normal functioning of man's psyche, and how many do so, even to this day!

Monakov's brilliant scientific career makes interesting reading, but the man behind all these achievements hardly emerges until the outbreak of the first world war and old age made him take some stock of the meaning of human existence.

Those interested in the cradle years of neurology will