

numerous problems which must be faced in evaluating the effectiveness of various types of treatment.

L. Diller (New York Institute of Rehabilitation Medicine) presented a survey of the current status of behavioral approaches to the improvement of sensorimotor capacities and social competence of the hemiplegic patient. He discussed the contribution that laboratory research may make to more effective practice. G. Gullickson, Jr. (University of Minnesota Medical School) underscored many points made in the presentation and emphasized the need for controlled research in the area. P. H. Stern (Burke Foundation, White Plains, N.Y.) described methods for the quantitative testing of motility defects in patients with stroke.

S. Horensein (Western Reserve University School of Medicine) reviewed the alterations in personality and emotionality accompanying cerebral disease; he considered the most effective methods of management and discussed the indications for needed investigative work. For example, the relationship of "nonanatomic" factors (such as life situation, personality structure, intelli-

gence) to the occurrence of infarction and resulting clinical picture is not really known. Current information is circumstantial in nature, and a major research project of a prospective character would be required to obtain hard data on this extremely important question. Planned future research should provide for longitudinal investigation of the patient over an extended period of time since many of the phenomena that are observed are unstable during the first few months of illness. In his discussion, R. B. Bauer (Wayne State University College of Medicine) emphasized the relatively greater importance of organic, as opposed to "nonanatomic," factors in the production of emotional and personality disorder in stroke patients. R. Satran (University of Rochester School of Medicine) described the findings of a clinical study in which the occurrence of cerebrovascular disease was apparently related to life situational factors. C. H. Millikan (Mayo Clinic) emphasized the need for conceptual clarification in this area.

In a final commentary, A. L. Benton (University of Iowa) took issue with

the assumption that cerebrovascular disease, which is not associated with infarction or ischemia, does not result in behavioral impairment. He cited experimental studies of broadly defined normal samples in which cerebrovascular status has been found to be related to efficiency in tasks involving speed of reaction and short-term memory. He also called attention to the looseness of terminology and conceptualization in the field of aphasia and to the fact that lack of agreement with respect to both classification and assessment procedures have hindered progress in resolving the unsettled issues raised during the course of the workshop.

The workshop was held under the auspices of the Joint Council Subcommittee on Cerebrovascular Disease of the National Institute for Neurological Diseases and Stroke and the National Heart Institute.

Early publication of the major presentations and discussions at the workshop, together with an evaluative summary, is planned.

ARTHUR L. BENTON

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