

Reports of Scientific Meetings

Ellis N. Cohen, M.D., Editor

Emory University Conference on Pain

The First Annual Emory University Conference on Pain, held June 9–11, 1977, in Atlanta, Georgia, moved with embarrassing speed from the elusive topic of pain measurement to pain management. In retrospect, this haste seemed appropriate. At best, currently available pain measurements produce a catalog of static phenotypes of uncertain significance with respect to etiology and prognosis. Substrates of this problem are the Cartesian mind–body dichotomy to which many of our methods are wed and the temptation to generalize from narrow operational definitions of pain.

Measurements of neural conduction and muscle function were rapidly dismissed by Dr. Nettleson Payne as irrelevant to most chronic pain problems. Dr. Alon Winnie further discussed physiologic testing by elaborating on the technic of differential spinal anesthesia.¹ He employs graduated concentrations of intrathecal procaine to block the sympathetic and somatic sensory systems sequentially. With this technique, 70 per cent of patients with lower body pain of unknown etiology were shown to have pain mediated by the sympathetic nervous system and have an excellent prognosis. Features of this little utilized, 30-year-old test are so promising in terms of identifying patients with pain that persists despite adequate analgesia, those who respond to sympathetic blocks, and placebo reactors that diffusion of this simple technique seems inevitable. It is hoped that, with its widespread use, validating data from concurrent psychological tests and long-term follow-up studies will become available.

Dr. Irving Unikel discussed the applicability of psychological testing to the problem of chronic pain. His emphasis was on the use of Minnesota Multiphasic Personality Inventory (MMPI). The choice of this test is largely historical, in that it is probably the best standardized of the available psychological tests and there is an immense experience in its interpretation. Etiologically, the use of the MMPI is limited, in that patients with organic pain of longer than six months' duration cannot be distinguished from those who have psychogenic pain.² However, it may be useful prognostically in that patients who have the "neurotic or hysteric triad" of denial of emotional problems, absence of marked depression, and a somatic preoccupation may be good candidates for operant conditioning programs.³ This process of emotional change is interpreted as indicating that with chronicity, the pain complaint becomes independent of its original incitant and can be precipitated by the prospect of its reward or consequences. Dr. Wilbert Fordyce, who advocates the use of controlling the rewards of the pain complaint to abolish its frequency, also emphasized this point.⁴

Dr. Steven Brena emphasized the multifaceted aspects of pain measurement and crystallized a potentially useful clinical paradigm relating the psychological, behavioral and soma-

tic factors.⁵ He proposed that the data in each category be given a point value, which could be cumulated for charting on a two-dimensional–four-quadrant graph, with the abscissa indicating pathologic conditions and ordinate relating to pain behavior. Each quadrant represents a different patient category. Patients who have low scores for pathologic conditions (minimal findings on physical, neurologic, and radiologic examination and relatively unremarkable results of laboratory studies) and high scores for pain behavior (much complaining, low activity, high drug use, and abnormal MMPI) are the painmanship experts, or *l'homme dououreux*, of Szasz.⁶ These are suitable for operant conditioning. Patients who have minimal disease and minimal pain behavior are "pain verbalizers," *i.e.*, complainers for whom the therapeutic objective is "containment" by encouraging function rather than promoting cost-ineffective programs of psychotherapy. Patients who have evidence of disease and little pain behavior are "chronic reducers." Such patients have a good prognosis after correction of the primary organic problem.

The often ignored vocational rehabilitation aspects of chronic pain problems were superbly presented. Most patients are disabled in only one aspect of their activities, and many patients see pain careers as alternatives to working at uninteresting or stressful occupations. The resources of the vocational counselor for testing both the aptitudes and the interests of patients would seem especially useful for finding satisfying employment for them.

Of special interest to the anesthesiologist was the unusual use of therapeutic blocks in the context of an operant conditioning program. Such blocks are used for pain relief in lieu of habituating medication and as a reward for the patient's meeting activity goals.³ The question of whether these blocks are actually necessary is currently being examined, since it was observed that when blocks were not available, the patients still met their goals. In the operant conditioning context, these blocks represent a positive reinforcement despite their discomfort. The positive role is demonstrated by the fact that patients return for periodic blocks even after they complete the program.

At various points in the program, semantic caution was urged in discussing problems with patients. The physician should avoid the implication that the patient is "crazy" if there is a large dichotomy between the patient's verbalizations and disease. Such labels encourage the patient to search for organic validity by obtaining more medical consultations. The disease or psychosomatic model, which implies an organic basis for all pain, has been a special hindrance to therapy of patients whose pain complaint is operantly conditioned. Multidisciplinary consultations often emphasize a possible organic basis for chronic pain because of the narrow training of each of the specialists. A holistic orientation that provides an environmental as well as an organic perspective would have much to offer.

Unfortunately, most patients who have operantly conditioned pain behavior prefer to think of themselves in the illness model rather than the learning model. Many will not enter a learning program unless it has a medical pretext, e.g., physical therapy, nerve blocks, detoxification, etc. Similarly, overt group therapy or psychotherapy, even in the context of an operant conditioning program, may meet resistance.

The present pain conference went far in clarifying what testing resources were available. More could have been said about the advantages, disadvantages, and validity of each. Unfortunately, there was little mentioned regarding significance of the placebo response in testing or in treatment protocols. While these may appear to be greivous shortcomings, they are not due to inadequacies intrinsic to this conference. The latter was illuminating and provocative. The deficiencies merely reflect the state of the art of dolorology. As an annual clinical conference that is able to attract a multidisciplinary constituency and many luminaries in pain management as speakers, this forum serves a useful role in expanding the repertoires of all working in this field.

BERNARD S. MILLMAN, M.D.
Assistant Professor of Anesthesia
Stanford University School of Medicine
Stanford, California 94305

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Book Reviews

B. Raymond Fink, M.D., Editor

Bronchial Asthma, Mechanisms and Therapeutics. EDITED BY E. B. WEISS AND M. S. SEGAL. Boston, Little, Brown and Company, 1976. Pages: 1,076. Price: \$50.00.

The editors state in the preface, "We believe that sound acquisition of fundamentals is a prerequisite to a rational therapeutic approach, and have therefore devoted a portion of the book to *mechanisms* and the balance of *therapeutics* . . . we have attempted to organize in one volume the essential fundamentals as we perceive them. . . . It is our intent that these pages will provide guidance for rational understanding and management of a process unpredictable in its course and often all too difficult to control." Whether the editors have succeeded in this goal is difficult to determine in a book of this size, but they have certainly provided the reader with a highly informative volume of encyclopedic scope that is well organized, as well as comprehensive and authoritative in the treatment of most subjects. 118 authors have contributed to 73 chapters that are divided into two major sections: 1) Mechanisms of Bronchial Asthma; 2) Diagnostics and Therapeutics.

The first section includes chapters on the history of asthma and its relationship to other obstructive pulmonary diseases, genetics, and epidemiology; the fundamentals of immunology and their relationship to asthma; respiratory physiology; etiologic and environmental considerations. Section 2 provides chapters on diagnosis, treatment of chronic asthma, status asthmaticus, ventilatory care, asthma in children and in pregnancy, preoperative and postoperative, as well as anesthetic considerations, psychological aspects, the role of rehabilitation medicine, and two chapters devoted to complications and death. The writing style, clarity,

and scholarship vary among the chapters, as might be expected with more than 100 authors. The chapters on respiratory physiology are excellent and authoritative, including those by John B. West, J. A. Nadel, and E. R. McFadden. The chapter devoted to preoperative and postoperative considerations is both pertinent and informative. The chapter on anesthetic considerations by S. W. Woo, I. V. Malgopra, and J. Hedley-Whyte consists of only seven pages, but provides a wealth of information in a readable style and includes a useful review of 60 references from literature pertinent to that subject. The chapter on rehabilitation (by Allard Hass *et al.*) provides an excellent discussion, accompanied by illustrations, of chest physiotherapy and breathing exercises in asthma. The chapters dealing with bronchial asthma in children are informative, current, and well written, as are the chapter on status asthmaticus by one of the editors, E. B. Weiss, and the chapters on asthma in children.

One of the chapters of paramount interest to anesthesiologists, "Ventilatory Care of Status Asthmaticus," by T. L. Petty, is not of the caliber of the chapters mentioned above. The information presented is almost entirely based on the author's own considerable experience, and many of the important alternate opinions expressed in the literature regarding mechanical ventilation in patients with status asthmaticus have been omitted. The section on chronologic measures does not include a mention of the use of neuromuscular blockade as a means of coordination of the patient with the mechanical ventilator. The author further states that data to support the usefulness of intermittent mandatory ventilation as a weaning technique "are minimal at best and since the technique requires that the patient breathe through the resistance of an artificial airway, in