REPORTS OF SCIENTIFIC MEETINGS

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Conference on the Care of Patients with Severe Chronic Pain and Terminal Illness

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Sponsored by the AMA and the USPHS

The conference, which was by invitation only, was attended by physicians from medical specialty societies, basic and clinical research disciplines, drug companies, medical editors, and others interested in health care of the terminally ill. The principal emphasis was on appropriate drug therapy. A secondary goal was an evaluation of the role of health-care professionals in planning and implementing treatment programs for cancer patients.

The scientific session was opened by Edward N. Brandt, Jr., M.D., Ph.D., Assistant Secretary of Health in the Department of Health and Human Services, who presented an overview of severe, chronic pain as a serious medical problem. He emphasized that medical education fails to train physicians in the effective care of terminally ill patients. This has necessitated interdependence among health-care professionals to maximize the management of patients with chronic pain (of malignant and nonmalignant origin). It is in this interactive spirit that more and more anesthesiologists are consulted. As our specialty creates opportunities for the care of patients beyond the strict confines of the operating room, we can expect the demand for pain-oriented consultations to increase.

John J. Bonica, M.D., Chairman Emeritus and Professor of Anesthesiology at the University of Washington School of Medicine, decried the lack of application of effective treatments that are currently available and commented that the public's knowledge of this failure in health care engenders more fear of malignant disease. His extrapolation of small study data to national and international populations of patients with cancer showed that, on the average, 63% of such patients experienced pain sometime during their illness, and that there is an increase in incidence as the disease progresses. The same physical and psychosocial deterioration that has been so well-documented in patients with chronic nonmalignant pain occurs more rapidly in patients with malignancy. He emphasized that pain control in the terminally ill also has been neglected in the areas of funded research, professional education, and interspecialty communication. Pain due to malignancy will continue to be a serious national health problem until more aggressive programs to answer these deficiencies are developed.

The clinical pharmacology of opioid analgesics was presented by Raymond W. Houde, M.D., attending physician in the Department of Medicine at the Memorial Sloan-Kettering Cancer Center. He reviewed a number of areas of controversy and evaluated data from studies in the scientific literature. He reminded the audience that the traditional analgesic benchmark, morphine, has an oral to systemic dose ratio of 6:1, and that only 20–30% of an oral dose is available to provide analgesia. This information, and its half-life of three hours, should dictate the dose and frequency of this drug. He stated that there is little advantage to the use of heroin, as this is an inefficient way to give morphine. Dilaudid, a highly soluble drug, is underutilized for systemic administration in cancer pain control. Meperidine was criticized for use in the terminally ill because of its short half-life, erratic absorption, and potential for CNS irritability from the normeperidine metabolite. Methadone was suggested as a better drug overall, although there is a tendency for progressive accumulation in the plasma due to its long half-life. Buprenorphine, a narcotic agonist-antagonist, looks very promising as an effective analgesic with morphine-like kinetics, good opiate receptor occupancy, and a strong likelihood that it will be effective even with sublingual administration.

The use of nonopioid analgesics alone and in combination with opiates was discussed by William T. Beaver, M.D., Professor of Pharmacology and Anesthesiology at Georgetown University School of Medicine. He indicated that aspirin and acetominophen are the drugs of first choice for mild pain due to cancer because they compare favorably to low-dose narcotics in providing analgesia with few side effects. As the dose of aspirin is increased, a ceiling effect for analgesia is reached at approximately 650 mg and gastrointestinal side effects and platelet dysfunction become significant. Acetominophen provides an equivalent degree of analgesia without the side effects of aspirin. Combinations of these drugs with codeine, oxycodone, or propoxyphene, fill a void that would occur between the maximal analgesic effect of aspirin or acetominophen alone and that of the major narcotics. Combination therapy, as opposed to fixed preparations commercially available, allows for increases in the narcotic dosage without exceeding the maximum daily dose for aspirin (4 g/day) or acetominophen (4–6 g/day). New, nonsteroidal, anti-inflammatory drugs can be used as well, in combination with minor narcotic drugs to maximize the management of pain. Combinations of aspirin or acetominophen with narcotic agonist-antagonist drugs were proposed for the future.

Kathleen M. Foley, M.D., Chief, Pain Service at the Memorial Sloan-Kettering Cancer Center, addressed the issue of effective prescribing practices in the management of severe pain. She stated that factors that interfere with proper treatment are fear, in both the patients and the physicians, of the necessary drugs and an education system that generates this fear. She recommended that physicians' attitudes must be changed if analgesics are to be used effectively. She emphasized the need to learn the pharmacokinetics of the analgesics, including the analgesic effect, significant difference in dosages between intramuscular and oral administration, and the common side effects that require treatment. Subarachnoid and epidural opiate drug administration have great potential for the future when more specific information about their risk/benefit ratio is available. However, regional anesthetic techniques must be used with caution in

patients with malignant disease because of the possibility of thrombocytopenia, leukopenia, or diminished immunoreactivity in these patients.

William R. Martin, M.D., Professor and Chairman, Department of Pharmacology at the University of Kentucky School of Medicine, closed the conference with a review of the opiate receptor theory and an emphasis on the important role that neurotransmitters of the amine and peptide type play in pain impulse transmission and modulation. He suggested that, with continued research, receptor-specific drugs with only positive agonist effects will be produced.

As this material was presented to a group of scientists and health-care professionals who are familiar with the concepts of pharmacologic management of patients with pain, it was concluded that the greater challenge lies in the education of others by those who attended the meeting. Only through dissemination of such information will physicians become better informed about the management of patients with pain and terminal illness.

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Erratum

In the article by Abramowitz *et al.* (ANESTHESIOLOGY 59:579–583, 1983) an error appeared in table 1. The corrected table is as follows:

The Incidence of Vomiting and Time (Mean ± SEM) for Recovery in the Droperidol and Placebo Groups

	Droperidol Group (n=21)		Placebo Group (n=26)	
	Number	Time (min)	Number	Time (min)
Vomiting	9	348 ± 21.4*	22	361 ± 13.1
No vomiting	12	284 ± 22.6	4	211 ± 18.0
Total	21	309 ± 17.1	26	338 ± 15.6

* Mean recovery time was computed for only eight patients since one patient stayed in hospital overnight.