REPORT OF THE
UNIVERSITY OF VIRGINIA HEALTH
SCIENCES CENTER ON

AN INVENTORY OF THE PAIN MANAGEMENT CURRICULA OFFERED IN THE COMMONWEALTH OF VIRGINIA'S THREE MEDICAL SCHOOLS

TO THE GOVERNOR AND
THE GENERAL ASSEMBLY OF VIRGINIA

SENATE DOCUMENT NO. 3

COMMONWEALTH OF VIRGINIA
RICHMOND
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UNIVERSITY OF VIRGINIA
HEALTH SCIENCES CENTER
SCHOOL OF MEDICINE

DEPARTMENT OF HEALTH EVALUATION SCIENCES

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October 31, 1997

Senator Jane H. Woods
Chair, Joint Subcommittee to Study the
Commonwealth's Current Laws and Policies
Related to Chronic, Acute and Cancer Pain
P.O. Box 1387
3527 Queen Anne Drive
Fairfax, Virginia 22030

Dear Senator Woods,

On behalf of the medical schools at the University of Virginia, Eastern Virginia Medical School, and Virginia Commonwealth University, please find enclosed a report in response to Senate Joint Resolution 366. The study is entitled, "An Inventory of the Pain Management Curricula Offered in the Commonwealth of Virginia's Three Medical Schools," and reports on the undergraduate, graduate, and continuing medical education pain management offerings within the three medical schools.

Please do not hesitate to contact me if you have questions about the enclosed report, or would like additional information based on the report's findings.

Sincerely,

Carolyn L. Engelhard

Carolyn L. Engelhard, MPA
Health Policy Analyst and Lecturer
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enclosure

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An Inventory of the Pain Management Curricula Offered in the Commonwealth of Virginia's Three Medical Schools

in response to

Senate Joint Resolution 366

Prepared by

Eastern Virginia Medical School
University of Virginia School of Medicine
Virginia Commonwealth University School of Medicine

November 1, 1997

Preface and Authorization for Study

In accordance with Senate Joint Resolution 366, the three medical schools within the Commonwealth of Virginia--the School of Medicine at the University of Virginia, Eastern Virginia Medical School, and the School of Medicine at Virginia Commonwealth University--surveyed their existing medical education curricula in pain and pain management to determine if the current offerings adequately reflected new information and national guidelines for the treatment of acute and chronic pain. This study was requested in order to assist the General Assembly's *Joint Subcommittee to Study the Commonwealth's Current Laws and Policies Related to Chronic, Acute, and Cancer Pain*, whose activities over the last three years have concentrated on improving the knowledge and attitudes among Virginia's health professionals on the relief of pain. In addition to an inventory of their current educational offerings in pain treatment and pain management, the medical schools were asked to report on possible ways to include more comprehensive instruction on chronic, acute, and cancer pain management within their institutions and in the Commonwealth.

The authors of this report are members of the Schools of Medicine at each of the three institutions: Carolyn L. Engelhard, MPA, University of Virginia; Stephen P. Long, M.D., , Virginia Commonwealth University, Medical College of Virginia Campus; and Christine C. Matson, M.D., Eastern Virginia Medical School. The authors gratefully acknowledge the contributions of the many individuals within each institution who assisted in the preparation of this report.

SENATE JOINT RESOLUTION NO. 366

Requesting the Medical College at Hampton Roads, the Medical College of Virginia of Virginia Commonwealth University and the University of Virginia Medical Center to study the inclusion of pain management in their curricula.

Agreed to by the Senate, January 30, 1997
Agreed to by the House of Delegates, February 13, 1997

WHEREAS, the Joint Subcommittee to Study the Commonwealth's Current Laws and Policies Related to Chronic, Acute and Cancer Pain has worked hard over the past three years to improve the knowledge and attitudes among Virginia's health professionals on the relief of pain; and

WHEREAS, although common sense would indicate that a primary function of medical and other health practitioners is to relieve pain, many practitioners still view pain as a natural and unavoidable, incidental product of disease and injury; and

WHEREAS, many health practitioners are still unaware of the existence of the national pain guidelines for acute and cancer pain that were developed by the Agency for Health Care Policy and Research in the United States Department of Health and Human Services; and

WHEREAS, many prescribers are unaware of the benefits of pain management on the patient's overall condition and quality of life, e.g., shorter stays in acute facilities, quicker return to work, expanded activities, better social relationships, and less stress and anxiety; and

WHEREAS, anecdotal information presented to the joint subcommittee concerning instruction in pain management indicates that little, if any, time is dedicated to this subject and that many medical students, interns, and residents—even those practitioners whose patients are beset with great pain—may be receiving insufficient guidance in this very important area; now, therefore, be it

RESOLVED by the Senate, the House of Delegates concurring, That the Medical College at Hampton Roads, the Medical College of Virginia of Virginia Commonwealth University and the University of Virginia Medical Center be requested to study the inclusion of pain management in their curricula. The three medical schools shall jointly provide a preliminary report to the joint subcommittee to study the Commonwealth's current laws and policies related to chronic, acute, and cancer pain on their study and on possible ways to include more comprehensive instruction on chronic, acute, and cancer pain management within their curricula by November 1, 1997.

The three medical schools shall complete their work in time to submit their joint findings and recommendations to the Governor and the 1998 Session of the General Assembly as provided in the procedures of the Division of Legislative Automated Systems for the processing of legislative documents.

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Introduction and Overview

Millions of people in the United States deal with pain from chronic or acute conditions. Annually, 15% to 20% of the population suffer from acute pain, and 25% to 30% have chronic pain. These conditions can be debilitating, which can result in lowered productivity, lessened quality of life, and increased cost and use of health services (Reinking 1995). Pain management is a relatively new specialty in medicine, and there is still little consensus in either the academic literature or in practice guidelines about how pain should be treated. Many patients do not receive adequate treatment for their pain. This is due to many reasons: failure to diagnose pain properly, lack of education about treatment modalities, lack of research into the effectiveness of pain treatment options, fear of addiction to narcotics, and problems with laws and regulations surrounding prescription drugs and reimbursement (Barnett 1994).

National organizations have recently focused efforts on pain management. The American Medical Association's Council on Scientific Affairs identified barriers to optimal pain management in its 1995 report *Aspects of Pain Management in Adults*, including concern about regulatory oversight. Two years later, the AMA issued a press release that reported their findings with regard to the problems surrounding effective pain management. The American Society of Anesthesiologists recently published practice guidelines for chronic pain management. The guidelines outline a definition of chronic pain and focus on the knowledge base, skills, and range of interventions that are deemed essential to proper pain management. Other organizations, such as the American Academy of Pain Medicine, the American Pain Society, and the American Medical Association, are in the process of producing guidelines, and several organizations are helping to educate patients and providers about chronic pain and possible treatments. The U.S. Agency for Health Care Policy and Research (AHCPR) has published a series of guides on acute pain management, acute low back pain management, and cancer pain management. Up to this date, no guide on treatment of chronic pain has been published by AHCPR, but efforts are underway by several research groups to develop such a guide.

Even though the importance of proper caregiver and patient education on pain management is not in dispute, actual education efforts have had varying degrees of success and penetration (Clarke 1996, Brunier 1995, Campbell 1992, Parris 1992, Wolff 1991). Most studies in this area have concluded that more education on pain management is necessary for all health professionals, but suggest that it is difficult to change historical clinical practice patterns or attitudes. Several journals have published continuing medical education articles on chronic pain management (Montauk 1997, Lister 1996, Stacey 1996, Reinking 1995, Helme 1993), but many seem anecdotal and therefore have limitations as to their generalizability. However, in one controlled experiment at the University of Washington, researchers developed and evaluated a physician education intervention to improve primary care for low back pain. This program had a significant impact on physician *knowledge* of treatment modalities, but it

did not significantly improve *patient outcomes or physician attitudes* toward pain patients (Cherkin 1991a, Cherkin 1991b).

Several states across the nation are beginning to address the issues surrounding the regulation of pain management and the education of professionals about the issues surrounding the treatment of pain. Within the Commonwealth of Virginia, a legislative *Joint Subcommittee to Study the Commonwealth's Current Laws and Policies Related to Chronic, Acute, and Cancer Pain* was appointed three years ago to investigate the current regulations with regard to pain and pain management, and to improve the knowledge and attitudes among Virginia's health professionals on the relief of pain. As part of the Joint Subcommittee's activities, a "pain summit" was held in Richmond, Virginia, in December of 1995. This conference brought together educators, patients, legislators, and clinicians to increase the knowledge, understanding, and implementation of effective, up-to-date acute and cancer pain management techniques, both pharmacological and nonpharmacological. Specific topics addressed at the conference included: Issues in acute and cancer pain management; integrating clinical practice guidelines into medical practices; the ethical, legal, and regulatory issues surrounding pain management; cost and reimbursement issues; and understanding how to treat pain in the very young and the very old.

Similar activities were developing in other states. In 1994, the Governor of California mandated the formation of a committee to study appropriate pain management. This group concluded that many patients do not receive optimum treatment, especially prescription drug treatment. They also urged providers and payers to place more emphasis on pain management, especially in educating patients about their options. Continued efforts in this field have led to the *California Pain Patient's Bill of Rights*, a bill that would increase access to narcotics for patients in severe pain. Other states, such as Oklahoma and New York, are currently working on bills that would increase treatment options for chronic pain. In New York, legislators are close to passing a bill that would require insurers to pay for visits to chiropractors.

In 1994, the American Medical Association surveyed readers of the *Journal of the American Medical Association* (*JAMA*) to find out if physicians tend to underprescribe controlled substances to treat chronic, intractable pain because of potential sanctions on their licensure. The informal poll found that fear of disciplinary action led many physicians to state that they give lower dosages, choose other drugs, and give fewer refills than are appropriate due to the risk of investigation by state enforcement systems. Another survey in Wisconsin showed that several providers erroneously believe that prescription of opioids for chronic non-malignant pain is illegal (Rapp 1994). The American Academy of Pain Medicine and the American Pain Society issued a consensus statement on the use of opioids for cases of chronic pain. The statement, which contains prescribing guidelines, comes at a time when many state legislatures, health departments, medical boards and medical societies are revising their policies about prescribing opioids for some chronic conditions. In the near future, Virginia will have similar pain guidelines.

The burgeoning research in the treatment of pain and pain management techniques suggests a growing need for physicians to learn about the benefits of pain management and how it directly relates to patients' overall condition and quality of life. It is incumbent upon the medical schools to ensure that their medical education programs, whether in undergraduate, graduate, or continuing medical education curricular offerings, reflect the most effective treatment modalities for acute, cancer, and chronic pain, as delineated in national guidelines.

Current Offerings in the Three Medical Schools

The following sections of the report present the medical education offerings of the three medical schools in the Commonwealth of Virginia. While distinct, the three Schools of Medicine demonstrate a commitment to provide consultative, treatment, and educational services to the patients (and their families), nurses, and physicians within their institutions, and to provide community education when feasible and appropriate. A panoply of undergraduate, graduate, and continuing medical education offerings in pain and pain management are available within each school. These combine traditional educational formats with more patient-centered, "hands-on" approaches in understanding pharmaceutical use and managing pain within complex and varied clinical environments.

The three medical schools are focusing on the future with regard to pain treatment, pain management, and medical education, with more emphasis on studying clinical outcomes associated with aggressive pain management techniques. In addition to beginning to plan formal curriculums in pain management that emphasize the relationship between specific techniques and clinical outcomes, the three institutions are also tracking the economic efficiencies found in following established clinical pathways. In this way, national guidelines that focus on understanding acute and chronic pain will be integrated into the educational and clinical enterprises, creating a seamless transition from the classroom to the clinic to the community. These educational and clinical advances, in tandem with on-going basic and applied research initiatives, ensure continuous improvement in pain treatment and pain management, and underscore the institutions' commitment to educate health professionals and care for the citizens of Virginia.

Statewide Pain Management Initiatives

Joint Subcommittee to Study the Commonwealth's Current Laws and Policies Related to Chronic, acute, and Cancer Pain Management. As mentioned earlier in this report, the Governor, at the request of the Commonwealth of Virginia's Senate and House of Delegates, appointed in 1994 the Joint Subcommittee to Study the Commonwealth's Current Laws and Policies Related to Chronic, acute, and Cancer Pain Management. The subcommittee addressed the growing need to emphasize the importance of providing all citizens within the Commonwealth of Virginia access to quality pain management. In addition, the subcommittee wanted to provide a forum for study about various pain conditions and the availability of information on national guidelines in the treatment and management of pain. As a result, the activities of the

Joint Subcommittee over the last three years have concentrated on improving the knowledge and attitudes among Virginia's health professionals on the relief of pain. Physician membership and representation on this committee consists of representatives from the Virginia Commonwealth University School of Medicine (Stephen P. Long, M.D.) and the University of Virginia School of Medicine (John C. Rowlingson, M.D.).

Medical Society of Virginia, Subcommittee on Pain Management. At the 1996 annual meeting of the Medical Society of Virginia's House of Delegates, the legislative body of that organization recognized the lack of national consensus as well as the need for parameters concerning the proper use of opioids for patients with intractable pain of non-cancer origin within the Commonwealth. In order to more thoroughly and adequately educate its physician constituents, the Society charged a subcommittee on pain management with producing guidelines for the practicing physician for the management of chronic non-cancer pain with opioid analgesics. These guidelines, developed by appointed members of the Medical Society, State Board of Medicine, and the Virginia House and Senate, will be introduced in the form of a resolution at the Medical Society's 1997 meeting. It is hoped that these guidelines will help alleviate fears among physicians and patients about the proper role and subsequent use of opioid analgesics in aggressive pain management. Furthermore, the guidelines will serve as an educational tool to teach health professionals, law enforcement officials, and elected representatives about issues such as addiction, tolerance, physical dependence, and pharmaceutical abuse. Understanding the distinctions among these clinical outcomes will diminish the often-unfounded stigma against proper opioid prescription in chronic pain patients. (A draft report of the Medical Society of Virginia's Subcommittee on Pain Management is included in the Appendix.)

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Eastern Virginia Medical School
Curriculum in Pain Management

CURRICULUM IN PAIN MANAGEMENT AT EASTERN VIRGINIA MEDICAL SCHOOL

Introduction

The perceived problem of neglect of pain management as a focus of study in medical school curricula may relate to the dominance of the curative model in current medical education (Fox, 1997). Curing disease often takes preference over attention to quality of life issues in the structure of medical education. The traditional didactic curriculum tends to focus on disease entities rather than on patients' experience of illness. Medical training prepares physicians to be most comfortable with "objective" data; whereas pain is the most subjective of experiences. Those settings in which management of chronic pain and pain in the dying patient (ambulatory and long-term care facilities and hospices) have not been a major portion of students' clinical experience.

The Eastern Virginia Medical School pre-doctoral curriculum consists of two major components: a traditional, discipline-based approach and a newer interdisciplinary, longitudinal component. In the traditional curriculum, a variety of topics related to control of pain are distributed throughout the various discipline offerings. For example, the neural pathways for pain are addressed in neuroscience (M1); the specific analgesic drugs in pharmacology (M2); and approach to evaluation, diagnosis, and management of pain in various organ systems are addressed in the clerkships (e.g. abdominal pain, back pain, and peripartum pain) (see Appendix A). In addition, on the pediatric clerkship and geriatric clerkship, pain management and the approach to the whole patient are addressed as it presents commonly in the respective age-group. We expect that through clinical experience in the traditional clerkships, in M4 electives, and especially during residency, students will see and learn the approach to patients with both acute and chronic pain under the tutelage of experienced attending physicians. Students may also pursue elective experience in pain management and palliative care as an M4 elective, either at EVMS (pain clinic in neurology or physical medicine and rehabilitation), or at other schools.

A recent thrust in curricular emphasis at EVMS has been increased attention to the patient-centered clinical method (PCCM). This approach demonstrates the philosophy that the patient's experience of illness has as much validity for the physician's study as the biomedical disease. This model includes palliative care as well as the curative approach as valid components of excellent healthcare.

If physicians believe that their role is to cure disease, but have nothing further to offer if cure is beyond reach, then a patient's needs for management of

pain or other chronic conditions, and comfort measures at the end of life may be neglected. The increasing burden of chronic disease and suffering in the population, including a higher percentage of the disabled and elderly in the population, necessitates the inclusion of the palliative model for medical training.

These components of this patient-centered approach to medical care are part of our *longitudinal curriculum*:

1. In the M1 year, students learn the model of patient-centered interviewing, that explores patients' experience of illness (their feelings about their experience, ideas regarding causation and treatment, the effect of symptoms on their daily activities, and their expectations of contributions the doctor can make to their care versus self-care or care from other providers). Emphasis on partnership in the doctor-patient relationship facilitates the students' learning to attend more to patients' needs rather than primarily focusing on diagnosis and exclusively medical intervention.

2. Students are paired with generalist physicians in the community setting from the first year of their education. This helps students to understand the disproportionate burden of chronic pain among ambulatory populations, that might not be appreciated from primarily hospital-based rotations (e.g., the elderly woman with severe pain from osteoarthritis, who would never be admitted to the hospital for this diagnosis).

3. The new generalist courses in the first two years emphasize prevention, which in the case of pain management frequently means limitation of dysfunction because of a medical condition or pain itself. This experience has included required visits to a rehabilitation site in the community, a longitudinal experience with an elderly patient with a chronic condition, instruction in the electophysiology of stress, commonly resulting in chronic musculoskeletal pain, and a prevention project that includes prevention of functional disability. Often patients who do not find pain relief from allopathic medicine visit non-traditional providers. Students study different traditions in medicine, including those termed "complementary" or "alternative" in this country, that have a more elegantly developed diagnostic schema for different types of pain than does allopathic medicine. As an example, osteopaths, chiropractors, acupuncturists, and others discuss their methods of addressing patient needs, frequently for the management of pain, by alternative methods.

4. The ethical issues associated with end of life care, pain management, and responsibility of physicians to provide comfort care to those who are dying was discussed at the fall student/faculty retreat featuring Dr. David Thomasma, in September 1997. These issues are also discussed as part of the usual medical ethics curriculum, and briefly as part of the Health Behaviors

unit in M1, when addictive behaviors and appropriate prescription of analgesic medications are addressed.

5. A nine-hour module on Life, Death, and Dying has been incorporated into an interdisciplinary orientation for M3 students beginning their clerkships. This focuses on the needs of the dying patient, including particularly the management of pain. Perhaps its major benefit is enhancing student skills in discussing painful topics with patients and learning from patients what is most important in their care.

6. A new addition in the 1997-8 academic year is the presentation of a two-hour module on pain management, including acute and chronic pain, and pain in the dying patient, to the third year clerks' interdisciplinary Saturday seminar.

Planned Activities

Eastern Virginia Medical School is taking incremental steps in the direction of a curriculum focusing on patient-centered care and population-based issues. An interdisciplinary group interested in pain management and palliative care are meeting to assess current curricular offerings, and to recommend revisions within the curriculum that would better provide a step-wise approach to foster a high level of competence in our graduates to address pain management and palliative care. Their recommendations will very likely include the development of a "pain module" in pharmacology, perhaps integrated with other courses that would address pain management as an issue, including non-pharmacologic approaches, beyond discussing individual analgesic agents.

GME and CME

Pain management is addressed in our graduate programs as the diagnosis and management of pain in various organ systems, and through the tutelage of attending physicians in the course of patient care.

The residency, campus-wide, and CME offerings presented by EVMS in the two last years in the area of pain management are attached as Appendix B.

Eastern Virginia Medical School will continue to review the additional need for these types of offering.

Reference:

Fox, Ellen. "Predominance of the Curative Model of Medical Care." *JAMA 278:761-763 (1997)*

Appendix A

PAIN MANAGEMENT AT EVMS

(September 97)

1. Pharmacology

- General Anesthetics
- Clinical Aspect of General Anesthetics
- Local Anesthetics
- Opioid Analgesics and Antagonists

2. Geriatric Clerkship

- **Pain Management:**

  a). Lecture: Pain Management in the Older Patients. 1.5 hours

  b). Hospice Experience: visit one assigned hospice agency. 4 hours.
  Obtain patient's medical history and develop a treatment plan for pain management

3. Internal Medicine Clerkship

- **Abdominal Pain:** Develop an evaluation and treatment plan for patients with Abdominal Pain including appropriate request for GI consultation, surgery, or psychotherapy for chronic pain management.
- **Back Pain:** proper use of analgesics and muscle relaxants; teaching patients back hygiene measures, proper use of bed rest and exercises, and mechanics of listing and standing;
- **Chest Pain:** Develop an evaluation and treatment plan for patients with ischemic chest pain; Demonstrate knowledge of indications, actions, side effects and adverse drug reactions of nitrates, beta blockers, calcium channel blockers, aspirin, heparin and warfarin and indications for thrombolytic therapy, coronary angioplasty, and coronary artery bypass surgery
- **Joint Pain:** Presenting signs and symptoms and key diagnostic criteria for osteoarthritis, rheumatoid arthritis. Crystalline arthritis, lupus, and septic arthritis. Proper use of medications for relief of join pain and be able to refer patients to a rheumatologist or surgeon when appropriate.

4. Family Medicine Clerkship

- **Arthritis:** To be able to differentiate osteoarthritis, rheumatoid arthritis, Gout, Pseudogout, and infectious arthritis appropriately, including history, physical findings, lab results, radiographic abnormalities, and knowledge of criteria for referral to a specialist.
- **Abdominal Pain**
- **Chest Pain**
- **Headaches**
- **Low Back Pain**
- **Neck Pain**
- **Shoulder Pain**

5. Pediatric Clerkship

- Analgesic for Circumcision
- Pain Management in Critically Ill Children

6. Surgery

- Management of Pain During the Diagnostic Phase of Surgical Evaluation
- Post-Operative Pain

7. Obstetrics

- Pain Management During Labor

8. Psychiatry

- Addictive Disorders (illicit and prescribed drugs)

Electives: Pain Clinic
Chronic Pain

LOWER ABDOMINAL PAIN IN THE NONPREGNANT PATIENT
09/14/95 THEO KOURY
Emergency Medicine Lecture Series

ABDOMINAL PAIN IN THE ELDERLY
09/21/95 MOSS MENDELSON
Emergency Medicine Lecture Series

Differential Diagnosis of Chest Pain
06/08/95 Michael J. Bono
Emergency Medical Lecture Series

An Approach to The Management of Joint Pain
01/25/96 Sarah B. Clarkson
Accomack County Med Society Quarterly Meeting

Pain Management
03/01/96 William Owen
Tumor Conf.- CHKD

THE CASE FOR OPTIMAL MGT OF POST-OPERATIVE PAIN
04/20/95 RICHARD PAYNE
Surgery Grand Rounds

INTERDISCIPLINARY ASSESSMENT & MGT OF CANCER PAIN
04/22/95 RICHARD PAYNE
Surgery Grand Rounds

RIGHT LOWER QUADRANT PAIN & BENIGN PULMONARY NODULES
09/12/95 JEFFREY RIBLET
Interesting Case/Topic

Cost-effective Evaluation of Chest Pain syndrome
12/08/95 George Beller
CME Lecture Series - CGH

SYMPATHETICALLY MAINTAINED PAIN
10/12/95 ROBERT B. HANSEN
Assessment & Mgmt of Chronic Pain Disorders

MGT OF PAIN WITH NARCOTIC ANALGESICS
10/12/95 NEIL M. ELLISON
Assessment & Mgmt of Chronic Pain Disorders

PSYCHOLOGICAL COMPONENTS OF CHRONIC PAIN DISORDERS DIAGNOSTICS AND ASSESSME
10/12/95 NORBERT NEWFIELD
Assessment & Mgmt of Chronic Pain Disorders

Pharmacy Update: Pain Management, Everything Old Is New Again
11/02/95 BETH BRUSIG
Medical Staff CME Meeting-SHGH

New Updates in Chronic Pelvic Pain
12/19/95 MONICA A. HARRIS
Medical Grand Rounds - VAMC

New Dimensions inPain Mgmt - Healing Through Hypnosis
11/02/95 Donald Lynch
Hospice Circle of Care:Healing Past NGH

Hypnotherapy and Pain Management
11/02/95 Donald Lynch
Hospice Circle of Care:Healing Past NGH

Va Cancer Pain Initiative - "What's Happening In Va. and Beyond.
11/02/95 Patrick Coyne
Hospice Circle of Care:Healing Past NGH

Pain Management
04/06/95 Robert Nash
Medical Staff CME Program - SBH

Post-Operative Pain Management
08/10/95 Martin Ton
Medical Staff CME Program - SBH

Oncology Pain Management
08/17/95 John Harrington
Medical Staff CME Program - SBH

Oncology Pain Management
10/26/95 Robert Goldstein
Medical Staff CME Program - SBH

PAIN MANAGEMENT
09/26/95 ROBERT B. HANSEN
Internal Medicine Grand Rounds - OH

Acute and Chronic Pelvic Pain
09/22/95 JAMES WILLIE
OB/GYN Grand Rounds - NCH

Pain Management
10/06/95 OSWALD W. Hoffler
OB/GYN Grand Rounds - NCH

Treatment of Painful Shoulder
11/07/95 Edward Walko
Pediatric Grand Rounds - DPMC

PRACTICAL MANAGEMENT OF PAIN IN CANCER
03/01/95 OSWALD W. HOFFLER
Surgery Grand Rounds - NCH

Management of Pain
07/05/95 OSWALD W. HOFFLER
Surgery Grand Rounds - NCH

PRACTICAL MANAGEMENT OF PAIN IN CANCER
12/20/95 OSWALD W. Hoffler
Surgery Grand Rounds - NCH

Acute Abdominal Pain and G.I. Bleeding
02/14/96 WAYNE MCDERMOTT
Surgery Grand Rounds - NCH

PAIN MANAGEMENT
01/06/95 ROBERT NASH
Phillipine Medical Association

THE AHCPR GUIDELINE: ACUTE LOW BACK PAIN IN ADULTS, ASSESSMENT AND TXT
11/03/95 DONALD H. STEWART, JR.
95 Scientific Session of the MSV Annual Mtg

Use of Myocardial Perfusion Imaging in the Triage of Chest Pain Patients
05/02/96 Jim UDELSON
Cardiac Grand Rounds

Case Study: Painful neuropathy
05/03/96 Aaron I. Vinik
The Nuts and Bolts of Diabetes

New Techniques for Management of Childbirth Pain With Regional Anesthesia
03/06/97 Donald Caton
Ob/Gyn Grand Rounds

ACL Ganglion Cysts: Incidence in Patients Presenting With Knee Pain
04/13/96 KLIOZE
Radiology Residents' Day Conference

Cost Effective Work Up of Chest Pain
10/08/97 Donald Lipskis
Medicine Grand Rounds

The Non-Operative Management of Low Back Pain
06/20/97 Alan F. Doyle
Selected Topics in Phy Medicine and Rehab
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University of Virginia School of Medicine
Curriculum in Pain Management

Teaching About Pain and Pain Management
University of Virginia School of Medicine

Introduction

Medical education in pain and pain management at the University of Virginia School of Medicine combines both traditional discipline-based "cure" approaches as well as less traditional patient-centered "care" models. The combination of classic didactic educational strategies with "hands-on" clinical corollaries ensures that medical students, fellows, residents, and other health care professionals will receive adequate training in the understanding of pain and the importance of its management. Also, the addition of an in-patient hospice unit and the palliative care unit in the University of Virginia Hospital, the result of successful collaboration between Hospice of the Piedmont and the University of Virginia, provides education and training opportunities in palliative care. Recent studies have indicated that teaching about palliative care is received favorably by students, positively influences student attitudes, and enhances communication skills (Billings et al 1997; Fox 1997). Palliative care, in combination with the traditional curative methods in pain treatment, expands the continuum of pain management curricula offered in the School of Medicine for health professionals in both the in-patient and outpatient settings.

Undergraduate Medical Education

During their first year, medical students receive lectures that address the physiological causes and manifestations of pain, as well as the effects of pain on patients and their families. These include specific pain therapy or management lectures in the neurosciences (somatosensory anatomy and physiology, electrochemical signaling, and sensory transduction), clinical ethics (case-based instruction on forgoing life-sustaining treatment), anatomy (low back pain), and human behavior (pain, drug use and abuse, clinical neurophysiology, and death and dying). In addition, "The Doctor, The Patient, and the Illness" course is offered in the first year and combines lecture, discussion, and tutorials to help medical students learn to listen to their patients and to understand the nature of illness from the patient's perspective.

Second year pain management-related coursework includes courses in pharmacology and psychopathology, and examines their inter-relatedness. This is a very important area of scholarship and medical practice because of new information about the relationship between pain management and addiction medicine. In the clinical arena, both pain specialists and specialists in addiction medicine must have expertise in the pharmacology of pain-relieving drugs, be aware of the effects of their actual abuse or misuse, and follow or develop clinical guidelines about the appropriate use of opioid therapy to prevent the undertreatment of patients with pain. Traditionally, the two disciplines have developed largely in isolation from each other, despite their commonalities, and experts have recently called for their integration in medical education (Portenoy et al 1997). During their second year, medical students explore clinical care issues concurrently with their basic science studies in the areas of substance abuse, addiction, clinical psychopharmacology, and the appropriate use of opiates and anesthetic agents. In the

Introduction to Clinical Medicine course, students examine specific case studies that have a pain management component.

Medical students in their third year perform clinical clerkships, which deal with all types of clinical encounters in both the in- and out-patient settings. A new clerkship in anesthesia, with an emphasis on pain management, was added this year as an elective for third year students.

In the fourth year, most electives are four weeks long and place students in clinical settings where they routinely confront patient and pain management needs. Examples of electives with a special emphasis in this area include: anesthesiology (including one week in the Pain Management Center); death and dying; emergency medicine; palliative medicine; and medical acupuncture.

A list of the undergraduate medical education offerings specializing in pain and pain management is included in the Appendix.

Graduate Medical Education

All Anesthesia residents at the University of Virginia are required to complete rotations examining the treatment of acute and chronic pain under the direction of the faculty in the Pain Management Center. This training has been a standard component of UVA's anesthesia training for over twenty years, and utilizes the principles of pain evaluation and management as described in the Core Curriculum for Professional Education in Pain (IASP 1995). These principles include: 1) Knowing the key elements of a pain-related history and being able to use a structured interview to obtain the relevant information; 2) Being able to obtain a history of concurrent medical illnesses that may influence the patient's pain complaints or responses to interventions; 3) Being able to assess psychological factors and psychiatric disease as they relate to the patient's pain complaints; 4) Understanding the limitations of the medial model of disease for many patients with chronic pain and being able to assess pain in the absence of a clearly defined anatomical cause for that pain; 5) Being able to take a detailed medication history and understanding factors that lead to undertreatment of pain; and 6) Taking an integrated approach to pain management, including pharmacologic, neuroaugmentative, anesthetic, surgical, physiatric, and psychological approaches for acute and chronic pain management.

In addition, Grand Rounds presentations and other hospital-based clinical programs often address clinical issues with a pain management component, and these programs cross clinical subspecialties such as pediatrics, hematology/oncology, surgery, and anesthesiology. A list of recent pain-related programs is included in the Appendix.

Continuing Medical Education

The medical literature indicates that health care professionals have varied opinions about pain, pain education, and treatment modalities (Cherkin 1991a & b, Montauk 1997, Lister 1996, Stacey 1996). In particular, problems mentioned include: 1) inadequate knowledge of analgesic

pharmacology and pain therapy; 2) poor pain assessment; 3) concern about regulatory oversight; 4) fear of patient addition; and 5) concerns about the side effects of or tolerance to analgesics. Coupled with evidence that patients often lack knowledge about pain and available treatment options, continuing medical education programs are offered to medical professionals in training as well as to physicians practicing in the community. Several continuing medical education programs in the School of Medicine over the last few years have directly or indirectly addressed pain and pain management. These diverse offerings – from neonatal pediatric pain to end of life and palliative care – undergird UVA's commitment to an interdisciplinary and integrated curriculum in the understanding and treatment of pain. A list of selected CME programs is included in the Appendix.

Other University of Virginia Health Sciences Center Initiatives

Survey to Evaluate Knowledge and Opinion Regarding Palliative Care and Pain Management. During September and October 1997, a survey to evaluate the knowledge and opinions about palliative care and pain management among undergraduate medical students at the University of Virginia is being conducted. This survey will measure knowledge, attitudes, and beliefs about the use of pain management techniques, and participants will become acquainted with the current medical and societal issues surrounding palliative care. The results of this survey will be used to review and evaluate future curricular changes in medical education. A fourth year medical student at the University of Virginia participating in the Generalist Scholars Program initiated this project. A copy of the survey is included in the Appendix.

Pain Management Task Force. The results of two surveys at the University of Virginia Health Sciences Center, one (directed by a psychologist in the Pain Center) that analyzed knowledge and attitudes about the use of opiates in pain management, and another (directed by the Patient Satisfaction Committee) that examined patient satisfaction levels with the treatment of pain in the inpatient setting, led the Medical Center Administration to form a task force to improve the education and practice of pain management. The task force convened in June of 1996 and included a diverse group of health professionals from different clinical departments and service divisions. The charge of the task force was to review pain management practices at the hospital, identify issues that staff members deemed to be barriers to effective delivery of pain treatment, and to recommend actions that would improve patient care and satisfaction. The group early on endorsed a philosophy of pain management (see Appendix).

Within three months, the larger task force formed smaller subgroups that addressed the needs for intra-institutional and community educational programs, with institutional activities viewed as a first step. These efforts culminated in a "Pain Management Awareness Program," on September 22-26, 1997, and included a public awareness program and information about pain therapy strategies and resources within the institution. A yearlong series of monthly education programs began in early October 1997, with the kick-off lecture given by Dr. John Rowlingson, Director of UVA's Anesthesiology Pain Management Center. Other experts (inside and outside UVA) will be invited in the coming months. The new chief residents for all departments will be encouraged to include pain management-type presentations in their department's annual lecture programs. Finally, a letter will be mailed to all clinical department chairs asking them to identify

staff for the newly established Medical Center Speaker's Bureau on Pain Management, which will form the nexus of institutional and community-based pain education programs with the University of Virginia.

Future activities of the Pain Management Education Task Force are slated to include pre-admission pain management counseling, and the establishment of an "Ideal Pain Encounter", modeled after the existing "Ideal Patient Encounter," an in-patient, hospital-based quality initiative program. The creation of a pain management curriculum (patterned after the International Association for the Study of Pain Core Curriculum, see Appendix) is considered a high priority for the future.

Center for the Study of Complementary and Alternative Therapies. The Center for the Study of Complementary and Alternative Therapies (CSCAT) at the University of Virginia is a NIH-funded center established as a mechanism to stimulate research in complementary and alternative medicine (CAM) therapies. The CSCAT fosters research to evaluate the effectiveness, safety, and cost of selected CAM therapies used to achieve relief from pain and suffering. The Center is designed to increase the involvement of creative and highly trained researchers from academic and service settings with complementary providers in areas of scientific interests and relevance to the CSCAT's research agenda.

A significant core function of the CSCAT has been the development and implementation of a prioritized research agenda in CAM for the management of acute and chronic pain related to a variety of diseases, including pain associated with cancer. The CSCAT also provides information and technical assistance for CAM research development and has formed collaborative research groups to conduct studies related to mind-body therapies, structural manipulation, and bioelectromagnetic therapies. Additionally, members of the CSCAT faculty have developed a tool to study ways in which psychosocial factors moderate patterns of disease and therapeutic outcomes. Faculty and students within the Center test CAM therapies that support federal guidelines on pain management.

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Teaching about Pain and Pain Management
University of Virginia School of Medicine

Appendix

List of Enclosures

- Undergraduate Medical Education Course Offerings in Pain and Pain Management
- Selected Programs in Pain Therapy and Pain Management
- Selected Programs, Continuing Medical Education, 1995-1997
- Survey to Evaluate Knowledge and Opinion Among Undergraduate Medical Students Regarding Palliative Care and Pain Management
- Philosophy of Pain Management, Pain Management Task Force, 1996
- Table of Contents, Core Curriculum for Professional Education in Pain, International Association for the Study of Pain

Teaching About Pain and Pain Management
University of Virginia School of Medicine

Michael F. Rein, M.D.
Chair, Council on Medical Education

First Year:

Neurosciences:

Lecture: Somatosensory anatomy (1.5 hours)
Lecture: Somatosensory physiology (1.5 hours)
Lecture: Electrochemical signaling (1.5 hours)
Lecture: Sensory transduction (1.5 hours)

The Doctor, The Patient, and the Illness:

Lecture: Death and dying, palliative care (1 hour)
Tutorial discussion: Death and dying, palliative care (2 hours)
Tutorial discussion: Personal experience of terminal illness (2 hours)
General: Develop skills in listening to the patient and learning about the illness from the standpoint of the patient

Clinical Ethics:

Small group discussion: Death and dying, forgoing life sustaining treatment (2 hours)

Anatomy:

Lecture: Low back pain (1 hour)

Human behavior:

Lecture: Pain (2 hours)
Lecture: Drug use and abuse (2 hours)
Lecture: Clinical neurophysiology (2 hours)
Lecture: Death and dying (2 hours)

Second Year

Pharmacology

Lecture: Opiates (2 hours)
Lecture: Local anesthetics (1 hour)
Lecture: General anesthetics 1 (2 hours)
Lecture: General anesthetics 2 (2 hours)

Psychopathology

Lecture: Substance abuse 1 (1 hour)
Lecture: Substance abuse 2 (1 hour)
Discussion: Substance abuse (2 hours)
Lecture: Clinical psychopharmacology 1 (1 hour)
Lecture: Clinical psychopharmacology 2 (1 hour)

Introduction to Clinical Medicine

Case: Renal failure secondary to use of nonsteroidal antiinflamatory agent (2 hrs)
Cases: Several dealing peripherally with patients with varying degrees of discomfort

Third Year:

Clinical clerkships: All deal with patients and their care in the hospital and in the outpatient setting, Thus each of these courses frequently addresses with students issues of pain management.

Fourth Year: Most electives place students in the clinical setting, in which they routinely deal with issues of pain management. Listed are electives with a special emphasis in this area.

Anesthesiology Elective: 4 weeks, deals with all aspects of pain management as well as pulmonary function. Taken by 36 students (26.3%) during academic year 1995-1996
Death and Dying Elective: 4 weeks, deals with interactive skills in dealing with the dying patient, including pain management. Taken by 1 student during the 1995-1996 academic year.
Emergency Medicine Elective: 4 weeks, taken by 53 (38.1%) students during academic year 1995-1996
Palliative Medicine 4 weeks, deals with all aspects of palliative care. Newly offered.
Medical acupuncture, 2-4 weeks, concentrates on the treatment of painful musculoskeletal disorders, taken by no students during the 1995-1996 academic year

Miscellaneous

Medical Center Hour

Lecture: Complementary therapies in mainstream medicine, the argument for massage. (1 hour)
Lecture: Deciding about death: physician assisted suicide (1 hour)

Teaching about Pain and Pain Management
University of Virginia School of Medicine

Selected Programs in Pain Therapy and Pain Management

DEPARTMENT OF ANESTHESIOLOGY

Pain Management Center: *Journal Club – A Sampling of Weekly Topics:*

- Epidural Clonidine Analgesia for Intractable Cancer Pain
- Neurolytic Celiac Plexus Block for Treatment of Cancer Pain: A Meta-Analysis
- Treatment of Post-Herpetic Neuralgia: Antidepressants
- Chronic Use of Opioid Analgesics in Non-Malignant Pain
- Does Patient-Controlled Analgesia Achieve Better Control of Pain and Fewer Adverse Effects Than Intramuscular Analgesia?
- Italian Multicentric Study on Pain Treatment with Epidural Spinal Cord Stimulation
- Factors Predicting Short-term Outcome of Nerve Blocks in the Management of Chronic Pain
- Euthanasia and Physician-assisted Suicide: Attitudes and Experiences of Oncology Patients, Oncologists, and the Public
- Effects of Perioperative Analgesic Technique on Rate of Recovery After Colon Surgery
- Treatment of Patients with Multiple Rib Fractures Using Continuous Thoracic Epidural Narcotic Infusion
- Immunoisolated Xenogeneic Chromaffin Cell Therapy for Chronic Pain
- Situational and Psychophysiological Factors in Psychologically Induced Pain
- Cost Analysis of Two Implantable Narcotic Delivery Systems
- Ethics in Pain Management
- Pain Management in Children
- Pain Clinics – Present and Future
- Psychoneuroimmunology

Pain Management Center: *Tuesday Morning Meetings – A Sampling of Topic Areas*

- Implantable Pumps
- Women's Pain Issues
- Accupuncture
- Addiction Services
- Chronic Pain Support Group
- Neuropathic Pain Topics
- Complementary Medicine, Magnet Therapy
- Relaxation Rx/Biofeedback

Resident's Weekly Seminar – *Selected Topics*

- Issues in Cancer Pain
- Attitudes and Knowledge about Pain Management
- The Use of Opioids in Patients with Non-Cancer Chronic Pain
- Psychological Realities in Chronic Pain
- Perioperative Pain Control

FAMILY MEDICINE GRAND ROUNDS
- Low Back Pain
- Headaches
- Pain Management in Labor

PHYSICAL MEDICINE AND REHABILITATION GRAND ROUNDS
- Conservative Treatment of Low Back Pain
- Issues in Pain Management

ORTHOPEDICS GRAND ROUNDS
- Evaluation of Low Back Pain
- Diagnostic and Therapeutic Nerve Blocks of the Facets
- Conservative Treatment of Low Back Pain

NEUROLOGY GRAND ROUNDS
- Advances in the Pathophysiology and Treatment of Migraine

MEDICINE GRAND ROUNDS
- Issues in Contemporary Pain Management

Pain and Pain Management
University of Virginia School of Medicine
Continuing Medical Education
1995-1997

Selected Programs

November 1995 — *Current Approaches in Cancer Surgery: The Second Annual Case Management Seminar*
University of Virginia Cancer Center
"Pain Inteventions for Cancer," John C. Rowlingson, M.D.

March 1996 — *Expanding Palliative Care: An Interdisciplinary Focus*
UVa Cancer Center, Hospice of the Piedmont,
Center for Hospice and Palliative Care at Uva
"Pain Management in the Palliative Care Setting,"
John C. Rowlingson, M.D.

October 1996 — *Ethics in Health Care Institutions: New Issues, Controversies, and Practical Considerations*
Center for Biomedical Ethics, University of Virginia
Case Study Discussion, "Does No Always Mean No?"

November 1996 — *Current Concepts in the Treatment of Colorectal Surgery*
UVa Cancer Center and the UVa Department of Surgery
"Pain Management," John C. Rowlingson, M.D.

April 1997 — *The McLemore Birdsong Pediatric Conference and the The Virginia Chapter AAP/Virginia Pediatric Society Annual Meeting*
UVa Department of Pediatrics, The Children's Medical Center
The Virginia Pediatric Association, The Virginia Chapter of the AAP
"Pain Control in Children," small group session
"Sedation and Acute Pain Management," Douglas F. Willson, M.D.

June 1997 — *Integrating Healthcare and Spiritual Practices*
University of Virginia School of Medicine Continuing Medical Education
University of Virginia Division of Continuing Education
"Invitation to Integrated Care," Margaret Mohrmann, M.D.
"Challenge for Implementation of Integrated Practice,"
Marcia Day Finney, Ph.D.

University of Virginia Medical Student Survey

Please Circle School of Medicine Year: 1 2 3 4

PALLIATIVE MEDICINE SURVEY

CHOOSE AND MARK THE SINGLE BEST ANSWER

1. Burning shooting pain from Herpes Zoster is an example of:

   1) somatic pain
   2) visceral pain
   3) neuropathic pain
   4) vascular pain

2. All of the following are appropriate treatments for terminal delirium except:

   1) chlorpromazine (Thorazine) 25-50 mg po q6h
   2) having a family member stay at the bedside
   3) haloperidol (Haldol) .5-2.0 mg po qhs
   4) Amitryptiline (Elavil) 25 mg po qhs

3. When a cancer patient who is receiving opioids for pain complains of increasing pain, it most likely indicates:

   1) opioid tolerance
   2) opioid physical dependence
   3) increasing pathology of the cancer
   4) opioid addiction

4. Patients are eligible for benefits under the Medicare Hospice Benefit if their doctor certifies they have prognosis of less than:

   1) 3 months to live
   2) 6 months to live
   3) 9 months to live
   4) 12 months to live

5. The relative potency of PO Dilaudid to PO Morphine is:

   1) 3 mg of Dilaudid = 30 mg of Morphine
   2) 7.5 mg of Dilaudid = 30 mg of Morphine
   3) 15 mg of Dilaudid = 30 mg of Morphine
   4) 30 mg of Dilaudid = 30 mg of Morphine

6. Which of the following is a common misconception about pain and pain treatment in the elderly:

   1) increasing pain is a normal part of aging
   2) pain syndromes are likely to have atypical presentations in the elderly
   3) the elderly often require lower doses of opioids than younger patients
   4) the elderly commonly do not report their pain

7. The one phrase which best describes the concept of opioid "addiction" is:

1) an increasing need for a drug over time
2) loss of control of drug use
3) continued complaint of pain beyond the expected for a given medical problem
4) developing a withdrawal syndrome when the drug is stopped

8. In the chronic pain patient receiving opioids, 30 mg of oral morphine is equipotent to ___ mg of IV morphine:

1) 5 mg
2) 10 mg
3) 20 mg
4) 30 mg

9. Useful drugs for treating neuropathic pain unresponsive to opioids include all the following except:

1) lorazepam (Ativan)
2) phenytoin (Dilantin)
3) carbamazipine (Tegretol)
4) amitryptiline (Elavil)

10. The incidence of psychological dependence (addiction) to opioid analgesics, when used to treat moderate to severe pain from cancer or other medical conditions is:

1) very common (more than in 1 in 10 patients)
2) common(from 1:10 to 1:100 patients)
3) rare (from 1:100 to 1:1000 patients)
4) very rare(fewer than 1 in 1000 patients)

11. Which of the following statements about the Karnofsky score is not true:

1) the Karnofsky score is a useful measure of functional ability
2) when less than 50, the Karnofsky score can help predict prognosis
3) the Karnofsky score is a useful measure of quality of life
4) the Karnofsky score ranges from 0-100

12. Which on of the following statements is true concerning patients who experience nausea while taking opioids:

1) tolerance to nausea develops in most patients within 7 days after starting a new opioid
2) nausea represents a form of drug allergy
3) nausea to opiods is predominantly due to stimulation of the GI tract via the vagus nerve
4) nausea that first begins 2 weeks after beginning opioid therapy is most likely caused by the opioid

13. How soon after a dose of immediate-release oral morphine should the patient to be re-assessed to determine maximal analgesic effect:

1) 30-60 minutes
2) 60-90 minutes
3) 90-120 minutes
4) 120-150 minutes

14. New symptoms and signs of thirst, polyuria, and sedation, in a woman with metastic breast cancer, most likely represent:

1) hypernatremia
2) hyperglycemia
3) hypermagnesemia
4) hypercalcemia

15. The dose of breakthrough (rescue) medication (such as short-acting morphine - e.g. MSIR, MS soluble) for a patient on MS Contin is calculated at:

1) 10-20% of the total daily MS Contin dose
2) 20-30% of the total daily MS Contin dose
3) 30-40% of the total daily MS Contin dose
4) 40-50% of the total daily MS Contin dose

16. A dying patient is in the hospital with well controlled pain on a continous peripheral IV infusion of morphine at 3 mg per hour. The patient cannot tolerate oral, rectal, or transdermal opioids. The most appropriate plan for home opioid therapy is:

1) place a PICC line for home morphine infusion
2) continue use of peripheral IV morphine infusion therapy
3) place a Hickman catheter for home morphine infusion therapy
4) change the IV infusion to a subcutaneous morphine infusion

17. Pain that is described as dull and aching and is well localized over a bone metastasis is an example of:

1) visceral pain
2) vascular pain
3) neuropathic pain
4) somatic pain

18. Four weeks of increasing back pain, in the region of an abnormal plain spine radiograph (lytic or blastic lesion) in a patient with lung cancer is most worrisome for the presence of:

1) intrathecal or intramedullary metastases
2) a stable vertebral body compression fracture
3) epidural metastases w/ or w/o spinal cord compression
4) an unstable vertebral body compression fracture

19. Which one of the following criteria is required for Hospice admission under the Medicare Hospice Benefit:

1) DNR (no code) status
2) approach to care is palliative, symptoms oriented
3) diagnosis of cancer or AIDS
4) no current or planned use of tube feeding or TPN

20. The two classes of drugs most commonly recommended for treating terminal dyspnea include:

1) opioids and benzodiazepines
2) opioids and phenothiazines
3) opioids and anti-cholinergics
4) opioids and barbiturates

21. When prescribing laxatives to a dying patient with little oral intake, which one of the following drugs should be avoided:

1) bisacodyl (Ducolax)
2) senna (Senokot)
3) docusate (Colace)
4) psyillium (Metamucil)

22. Appetite may be improved in patients with the anorexia/cachexia syndrome with all of the following drugs except:

1) marijuana (Marinol)
2) dexamethasone (Decadron)
3) fluoxitine (Prozac)
4) megesterol acetate (Megace)

23. Therapeutic analgesic levels should not be expected after the first application of a Duragesic® patch until:

1) 2-12 hours
2) 12-24 hours
3) 24-36 hours
4) 36-48 hours

24. The most appropriate response when a patient starts crying, immediately after hearing bad news, is to:

1) leave the patient and say you will return in a short time
2) be silent
3) encourage the patient to seek counseling
4) tell the patient that there is always hope

25. All the following are useful predictors of prognosis within the final year of life of an AIDS patient, except:

1) T4 cell count
2) diagnosis of visceral Kaposi Sarcoma
3) uncontrolled diarrhea
4) diagnosis of lymphoma

26. Which percentage of cancer patients suffer pain:

1) 20%
2) 40%
3) 60%
4) 80%
5) 100%

27. What percentage of cancer patients suffer pain for > 1 month:

1) 20%
2) 40%
3) 60%
4) 80%
5) 100%

28. What percentage of pain can be relieved with treatment:

1) 20%
2) 40%
3) 60%
4) 80%
5) 100%

29. Which of the following is true:

1) most patients receive adequate pain treatment
2) patients receive more pain medication than necessary
3) the majority of patients are undermedicated

30. Psychological dependence on narcotics as a result of legitimate prescription to patients with cancer pain occurs:

1) very frequently (> 1 in 10)
2) frequently (1:10 to 1:100)
3) occasionally (1:100 - 1000)
4) rarely (<1 in 1000)

31. Suicide with an overdose of narcotics prescribed for cancer pain occurs:

1) very frequently (> 1in 10)
2) frequently (1:10 to 1:100)
3) occasionally (1:100 - 1000)
4) rarely (<1 in 1000)

32. The best judge of cancer pain intensity is:

1) the treating physician
2) the patient's nurse
3) the patient
4) the patient's spouse or family

33. Your degree of concern about addiction if a family member is given morphine for cancer pain would be:

1) no concern
2) mild concern
3) moderate concern
4) extreme concern

34. At what time is it appropriate for patients to receive maximal doses of analgesics:

1) any time
2) prognosis < 1 year
3) prognosis < 3 months
4) prognosis <1 month

35. Cancer pain is most likely due to:

1) cancer treatments
2) cancer itself
3) preexisting conditions unrelated to the cancer

University of Virginia

PHILOSOPHY OF PAIN MANAGEMENT

Although pain is a universal experience, its evaluation and treatment must be individualized. It is the right of every patient to have his/her pain management needs addressed by healthcare professionals. Understanding the patient's experience of the effectiveness of analgesia therapy, and other pain relieving measures, is essential to achieve a level of pain relief that is satisfactory to the patient.

Originally developed by the Pain Management
Education Task Force
October, 1990

revised by the Pain Management Task Force
July, 1996

CORE CURRICULUM FOR PROFESSIONAL EDUCATION IN PAIN

Second Edition

Task Force on Professional Education

Editor: Howard L. Fields

INTERNATIONAL ASSOCIATION FOR THE STUDY OF PAIN

IASP PRESS

Contents

Virginia Commonwealth University School of Medicine
Curriculum in Pain Management

AN INVENTORY OF PAIN MANAGEMENT EDUCATIONAL OPPORTUNITIES AT VIRGINIA COMMONWEALTH UNIVERSITY, SCHOOL OF MEDICINE MEDICAL COLLEGE OF VIRGINIA CAMPUS PRE-DOCTORAL EDUCATION, GRADUATE MEDICAL EDUCATION, CONTINUING MEDICAL EDUCATION

Introduction

Recently, there has been significant professional and public interest concerning the education of health care providers, especially physicians, in the management of patients with post-operative pain, chronic non-cancer pain, and cancer related pain. In the past 5 years the federal government, through the Agency for Health Care Policy and Research, U.S. Department of Health and Human Services, published federal guidelines for the management of patients with post-operative and procedural pain and followed these clinical practice guidelines with a similar publication outlining methods to manage cancer-related pain. Additionally, local and state medical societies, as well as specialty organizations are stressing the importance of proper instruction about pain management at all levels of the medical education process. Some states have even examined mandatory educational programs at the undergraduate, graduate, and post-graduate phases of the medical curriculum.

History

At Virginia Commonwealth University's Medical College of Virginia School of Medicine, the importance of teaching physicians about the pathophysiology, pharmacology, and clinical relevance of pain has been stressed for several decades. Having a rich history of being a national and international leader in the field of basic science and clinical pain research, the School of Medicine has taught to its medical students, residents, fellows, and attending physicians the basic applications of pain anatomy, diagnostic and assessment criteria, and clinical treatment modalities for many years prior to the more recent movement advocating more formal educational opportunities. Naturally, the medical curriculum at different levels has changed and adapted as newer scientific and clinical information has been made available.

Indicative of the commitment of both the Virginia Commonwealth University's School of Medicine as well its Medical College of Virginia Hospital system, in 1991 a multi-disciplinary task force was assembled to establish an in-patient pain management service to provide consultative, treatment, and educational services to the patients, nurses, and physician staff of the medical campus. Since its inception this specialty team of physicians, nurses, pharmacists, physical therapists, psychologists, and other counselors has effected treatment in tens of thousands of patients and has become a national model of excellence for other health care professionals and facilities. This in-patient service was a complementary effort to the well-established outpatient Pain Management Center which has been in existence at VCU for over 20 years serving the Richmond community, and assisting in the treatment of patients throughout the Commonwealth and surrounding

states. Members of these teams have travelled throughout the region, state, nation, and world sharing in the research and clinical activities concerning the science of pain medicine as conducted and applied at Virginia Commonwealth University.

Undergraduate Medical Education

As pain is one of the most common presenting complaints of patients to physicians, from the early stages of the first year medical student's didactic and clinical training experience the evaluation and treatment of pain complaints is stressed and taught in both classroom and clinical settings. Beginning with the basic pathophysiologic and pharmacologic mechanisms of pain during the first year of medical training, and followed during the second year of more clinically related didactic experience, the undergraduate student is exposed to over 67 hours of formal classroom lectures directly or indirectly related to pain. Also of important note is that from the second week of the first-year medical student's matriculation to VCU he/she is exposed directly to patient care in a clinical setting. This course, known as *The Foundations in Clinical Medicine* provides an overall focus in completely understanding the patients' view of illness and its effects on the patient, family, and health care system. Naturally, the student gains practical clinical experience in treating patients with varied pain states and complaints.
(See appendix A)

The structured clinical rotations during the third year of undergraduate medical training exposes the student to multiple required clerkships in various specialties of medicine, surgery, pediatrics, OB/GYN, psychiatry, neurology, and family practice in both inpatient and outpatient settings. Clearly, the student is allowed to apply that basic knowledge about pain, learned in the first two years of training, to the clinical scenario. Through daily contact with senior housestaff, attending physicians, as well as through interaction with the pain service, the student garners practical knowledge about diagnosing and treating many different types of pain. These courses also offer specific lectures pertinent to the management of pain.

The fourth year of medical training allows the student opportunities to take electives in areas of interest such as anesthesiology/pain management, emergency medicine, substance abuse, oncology, humanistic medicine, and alternative medicine. (See appendix A)

Graduate Medical Education

The structure of the Graduate Medical Educational program in pain management for the residents and fellows varies within departments from formal lectures either through resident conferences or departmental "grand round" events, to informal daily patient bedside "teaching" rounds with attending physicians and senior housestaff discussing the evaluation, diagnostic workup and treatment options of the patient with acute, chronic, and/or cancer pain. It is at this level that the Department of Anesthesiology-based Pain Service provides consistent (daily) educational and clinical service opportunities to the

graduate residents. Significant exposure to state of the art treatment modalities for many pain conditions is afforded to the consulting medical team. (See Appendix B)

Additionally, some departments, such as Anesthesiology, have mandatory rotations (two months per resident over 3 years) for their residents encompassing the evaluation and treatment of post-operative, chronic, and cancer pain.

Other venues, like the multidisciplinary Massey Cancer Pain Management Center provides residents from different disciplines (internal medicine, pediatrics, radiation oncology, hematology and oncology, anesthesiology) opportunities to examine patients suffering from cancer-related pain. Attending physicians within the center supervise physicians and students teaching state-of-the-art "hands-on" approaches to managing pain in a complex patient population.

Continuing Medical Education

Last, the University's Office of Continuing Medical Education has a long record of providing conferences and enduring materials about pain. For over 20 years, the OCME has sponsored local, regional, and national lectures, workshops, grand rounds, teleconferences, audioconferences, and other enduring materials pertaining to the patient with pain. These activities are reflective of the interest and enthusiasm of the VCU School of Medicine's expertise and leadership role in physiology, pharmacology, and treatment modalities involving the study of pain medicine. Additionally, dozens of clinicians and scientists from the university are invited on a continual basis to provide lectures and symposia throughout the world on various aspects of pain medicine. (See Appendix C)

Conclusion

In sum, the School of Medicine maintains a dedication to providing the most up-to-date information about the very important topic of pain to its students, faculty, and staff at all levels. In the future more emphasis will be placed on studying clinical outcomes associated with aggressive pain management techniques and the costs associated with medical care when clinical pathways are followed—specifically with modern approaches to managing patients' pain. The School will continue to provide a diverse and updated educational experience for its students and physicians allowing them to continue the historic leadership role produced by the scientists and physicians from the institution. The ultimate goal of this endeavor is to alleviate or attenuate the patient's pain in a state-of-the-art and humane fashion.

APPENDIX A

Undergraduate Medical Education Pain Management

FIRST YEAR

Foundations in Clinical Medicine:

Tutorial/Discussion: Back Exam/Back Pain (3hrs)
Tutorial/Discussion: Chief Complaint (3hrs)
Tutorial/Discussion: History of Present Illness (3hrs)
Tutorial/Discussion: Abdominal Exam (3 hrs)
Tutorial/Discussion: Musculoskeletal Exam (3hrs)
Tutorial/Discussion: Neuroanatomy Exam (3hrs)
Tutorial/Discussion: The Effective Physician (2hrs)
Tutorial/Discussion: Emotional Response to Illness w/simulated patients (3hrs)
Global: Overall focus in course on gaining a complete understanding of patients' view of illness and effects of illness on patient and family.

Anatomy:

Lecture: Wound Healing (1hr)
Primary Care Correlation: Back Pain (1hr)
Radiology Correlation: Bones and Joints (1.5hrs)
Primary Care Correlation: Sports Med-Mgmt. & Treatment of Injuries & Pain (1hr)
Primary Care Correlation: Abdominal Pain (1hr)

Behavioral Sciences:

Lecture: Human Behavior in Health and Illness (2hrs)

Neurosciences:

Lecture: Sensory Receptors (1hr)
Lecture: Somatosensory Systems: Pain & Temperature, Body & Head (1hr)
Lecture: Somatosensory Physiology: Pain and Temperature (1hr)
Lecture: Mechanisms of Analgesia (1hr)
Lecture: Somatosensory Systems: Conscious and Unconscious (1hr)
Lecture: Somatosensory Physiology: Tactile Sensations (1hr)
Laboratory: Somatosensory Systems (1.5hrs)
Lecture: Principles of Neuro. Exam (Sensory) (1hr)
Discussion: Clinical Cases (Somatosensory & Sensory) (2hrs)

Bioethics:

Lecture: Ethical Issues in Patients with Cancer (1hr)
Small Group Discussion: Neonatal Intensive Care Unit (1hr)

SECOND YEAR

Pharmacology:

Discussion Group: Marijuana in pain management (1.5hrs)
Lecture: Pain Control (Opiods, NSAIDS) (3hrs)
Lecture: Drugs for Rheumatoid Arthritis (1hr)
Lecture: Pain Control (Acetaminophen) (1hr)
Lecture: General Anesthesia (2hrs)
Lecture: Local Anesthetics (1hr)
Lecture: Sedatives and Hypnotics (1hr)

Hematology/Oncology:

Lecture: Treatment of Pain (1hr)
Lecture: Ethical Considerations in Oncology (1hr)

Neurobehavioral Sciences:

Lecture: Management of Acute, Chronic, and Cancer Pain (1hr)
Lecture: Substance Abuse (3hrs)

Women's Health:

Lecture: Sexual Assault (1hr)
Lecture: Domestic Violence (1hr)

Musculoskeletal:

Lecture: Approach to Pain (1hr)
Lecture: Psychosocial Impact of Rheumatoid Disease (1hr)
Lecture: Musculoskeletal Pain Syndromes (.5hr)
Lecture: Pain Management after Sports Injury (1hr)
Lecture: Lower Back Pain (.5hr)
Panel Discussion: Back Pain (1hr)
Clinical Case Discussions: Pain Management Cases (2hrs)

THIRD YEAR

Required Clinical Clerkships in Medicine, Surgery, Pediatrics, OB/GYN, Psychiatry, Neurology and Family Practice. Although all clerkships allow students an opportunity to address patient pain management issues, several clerkships also offer formal "core" lectures that provide pain management information in a more structured setting (eg, Medicine).

FOURTH YEAR (Electives)

Anesthesiology Elective: 4 weeks. Students will acquire skills in anesthetic and ventilatory management, and postoperative care. Clinical pharmacology and pain management in both inpatient and outpatient settings are heavily emphasized. Students gain significant exposure to a variety of pain states ranging from post-operative pain, chronic back pain, and terminal cancer pain.

Emergency Medicine Elective: 4 weeks. Rotation provides opportunity to learn emergency stabilization skills and approaches to the acutely ill or injured patient.

Substance Abuse Consultation Service Elective: 4 weeks. Students will learn how to assess patients with pain and the appropriate management of pain in many medical conditions.

Multidisciplinary Oncology: 4 weeks. Outpatient cancer clinics provide an arena for learning about cancer diagnosis and both palliative and curative treatment plans.

Humanistic Medicine: 4 weeks. Focus on doctor patient relationship. Identification/practice of qualities found in excellent physicians--goal is to help physicians in training become more responsive and aware of patient perspective, effects of illness, struggles with pain, etc.

Introduction to Complementary & Alternative Medicine: 4 weeks. Students exposed to varied methods of pain control/management from Ayurvedic medicine and acupuncture to Zen traditions.

APPENDIX B

Graduate Medical Education Pain Management Opportunities
1995-96 through 1996-97

Department of Anesthesiology
General Resident Lectures (1 hour each):

- Spinal Cord: Organization, function and monitoring
- Parasympathetic nervous system: physiology
- Sympathetic nervous system: physiology
- Pain mechanisms and pathways
- Local anesthetics
- Drug abuse/addiction/tolerance
- Central nervous system anatomy
- Central axis autonomic blocks
- Upper extremity anatomy and nerve blocks
- Lower extremity anatomy and nerve blocks
- Post-operative complications and discharge
- Anesthetic techniques in the pediatric patient
- Pharmacology of local anesthetics
- Epidural and spinal anesthesia
- CNS anatomy
- CNS physiology
- Nerve blocks and pain management review

Departmental Grand Rounds (1 hour each):

- American Society of Anesthesiology Annual Poster/Abstract Review
- Management of Pain in the Cancer Patient
- How the Anesthesiologist Manages Back Pain—Should Epidurals Be Offered
- Anesthesia for the New Millennium: You Ain't Seen Nothing Yet
- Narcotic Tolerance and hyperalgesia; A Current View of their Possible Interactions
- The Anesthesiologist's Role in Managing Reflex Sympathetic Dystrophy
- Phantom Limb Pain

Pain Management Center Fellowship Lectures (1 hour each):

- Post-operative pain control
- Anatomy of the Cervical, Thoracic, Lumbar, Sacral vertebrae
- Anatomy of the epidural and intrathecal space
- Anatomy of the peripheral and central pain pathways
- Anatomy of the spinal cord
- Peripheral nerve fibers and characteristics
- Local anesthetics, pharmacology and use in pain management
- Opioids: oral, systemic, agonist-antagonists
- Opioids: epidural and intrathecal
- Back pain: the physical exam
- Back pain: treatment options

Sympathetic nervous system and pain pathways
Sympathetic blocks: anatomy, indications, contraindications, and complications
Brachial plexus blocks
Intercostal, interpleural, paravertebral, blocks
Lumbosacral blocks: blocks of the LE, excluding sympathetics
Neurotransmitters and the effect on pain
Phantom limb pain
Peripheral nerve injuries: trauma, avulsion, neuroma, regeneration
Spinal cord injury, epidural hematoma and abscess, arachnoiditis
Postdural puncture headache
Central pain, thalamic pain
Adverse sequelae of pain
Non-steroidal anti-inflammatory drugs and pain
Anticonvulsants and pain
Antidepressants and pain
Adjuvant medications for pain: steroids, stimulants, and muscle relaxants
Neurolytic agents for pain
Sickle cell disease and pain implications
Trauma patients and pain
Headache
Herpes Zoster and Post-Herpetic Neuralgia
Neuropathies: diabetic and alcoholic
Myofascial pain, fibromyalgia
Facet pain syndrome
Epidural steroids and selective nerve root injections
Spinal cord stimulation and pain
Implantable drug delivery systems for pain
Neurosurgical approaches to pain: deep brain stimulation, hypophysectomy
Radiofrequency ablation for pain
Cryotherapy
Visceral pain
Pelvic pain

Pain Management Center Weekly Multidisciplinary Grand Rounds (1 hour):
Normal and abnormal mechanisms of pain (2 lectures)
Stages of pain
MMPI—Neopersonality
What is behavior modification for chronic pain
Biofeedback for pain
Evaluation of substance abuse in chronic pain
Epidemiology of chronic pain
Mechanisms of low back pain
Pain measurement and assessment
When will adequate pain management be the norm
When standard pharmacological treatment doesn't work—what next?
Use of opioids in non-malignant pain

Evaluation and treatment of pain patients by hand management
The treatment of headaches
Pharmaceutical diversion awareness
Treatment of opioid induced pruritis
Trigeminal neuralgia
Post traumatic stress disorder
Depression and cancer
Radiofrequency lesioning
Life after a pain fellowship
Reflex sympathetic dystrophy
Clinical cases of pain patients in litigation
Myofascial pain
Impairment rating and validity verification
Non-narcotic management of bony metastasis
McKenzie approach to spinal evaluation and treatment
Overview of drugs in pain management
New concepts in the treatment of fibromyalgia
Epiduraloscopy
Billing overview for pain management
Multidisciplinary pain management—a scientific approach

Department of Emergency Medicine

Students and housestaff rotating through the Emergency Department learn about pain management on a case-by-case basis with an emphasis on acute pain management.

Department of Family Practice

The forty residents in the five residency programs learn the principles and practice of acute and chronic pain management that relate to the conditions seen in the specialty areas. The patient care experience with over 1,000-2,000 ambulatory contacts per resident per year is rich with pain management problems such as acute and chronic headache, acute and chronic musculoskeletal pain, neuralgias, chronic pelvic pain, fibromyalgia, etc. Residents receive lectures on the care of these problems at required midday conferences. Specific lectures discussing chronic pain manamement and the appropriate use of norcotic pain relievers, are conducted annually.

Department of Internal Medicine

The housestaff is exposed daily to inpatient and outpatient, clinic-setting, patients with varied pain complaints of acute, chronic, and cancer origin. Basic teaching is through daily teaching rounds. Particular exposure to patient controlled analgesia and other opioid and non-opioid analgesics is derived during mandatory rotations on the hematology and oncology services during the three years of residency.

Department of Obstetrics and Gynecology

Annual lectures are conducted about post-operative and cancer pain management by visiting lecturers at the divisional level as well as during the departmental grand rounds.

Department of Orthopaedics

At least 3 departmental grand round activities concerning orthopaedic-related topics in pain management (acute post-operative pain management, reflex sympathetic dystrophy, medications, etc) are conducted.

In addition the residents, fellows, and attending surgeons have considerable interaction with the pain service as part of their clinical exposure to the treatment of post-surgical and trauma-induced pain.

Department of Physical Medicine and Rehabilatation

Formal didactic lectures (presented by faculty) to residents:

- Chronic pain
- Acute musculoskeletal pain
- Neuropathic pain
- Cancer pain
- Pain after spinal cord injury
- Psychological issues regarding chronic pain
- Modalities in the treatment of musculoskeletal pain
- Low back pain

Musculoskeletal pain in the older adult

- Pain and depression
- Magnets as a therapeutic pain modality
- Psychological factors in pain and cancer management

Grand Rounds Presentations (invited lecturers):

- Back pain and manual medicine
- Post-operative amputee pain management
- Reflex sympathetic dystrophy
- New procedures in pain medicine
- Lumbosacral spine treatment

Department of Pediatrics

Noon conferences:

- Management of acute and procedural related pain

Management of cancer pain

Grand Rounds:

One session per year about pain

All residents are taught the fundamentals of pain especially in the emergency department mandatory rotation (5 months/3 year residency), the Pediatric Intensive Care Unit (2 months/3 year residency), and the Hematology/Oncology rotation (1 month/3 years).

Department of Psychiatry

All psychiatry residents have a 1 hour seminar on pain management s part of their PGY3 consultation and liaison course. Additionally, there is coverage through lectures in the neuroscience course during the PGY3 year.

Department of Surgery

Pain management is taught daily on rounds in the intensive care units, general ward settings, and in the outpatient clinic settings. Pain management specific to individual services is taught by virtue of every resident rotating through those specific services where such issues are dealt with on a divisional basis. Additional pain management occurs by having at least two lectures per year presented at Surgical Grand rounds focused specifically on pain management issues and taught by persons outside of the department or surgery, characteristically anesthesiologists.

APPENDIX C

Continuing Medical Education Pain Management Conferences

1995:
--New Practice Guidelines for the Approach to Adults with Low Back Pain
Summer Retreat: Practical Issues in Primary Care
--Pelvic Pain
Clinical Concerns in Primary Care
--The Evolving Paradigm in Pain Management
Virginia Occupational Health Conference
--Diagnosis and Treatment of Shoulder Pain
Sports Medicine for the Primary Care Physician

1996:
--Spinal Manipulation and Low Back Pain
Clinical Concerns in Primary Care
--Pain Management for the Wound
Wound Care Symposium
--Shoulder Pain: Diagnosis and Treatment
Sports Medicine for the Primary Care Physician

1997:
--Treatment of Chronic Pain
Summer Retreat: Practical Issues in Primary Care
--Shoulder Pain: Diagnosis and Treatment
Sports Medicine for the Primary Care Physician
--The Use of Opioids in the Treatment of Chronic Non-Cancer Pain
Neurological Updates and Seminar

Other Enclosures

- *Bibliography of Practice Guidelines*
- *Draft Report, Medical Society of Virginia, Task Force on Pain Management*

Appendix

Practice Guidelines

Bibliography

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Practice guidelines for chronic pain management. A report by the American Society of Anesthesiologists Task Force on Pain Management, Chronic Pain Section. *Anesthesiology*. 1997;86:995-1004.

Appendix

MSV Draft Report of their Task Force on Pain Management

REPORT OF MEDICAL SOCIETY OF VIRGINIA PAIN MANAGEMENT SUBCOMMITTEE

Preface To The Medical Society Of Virginia Pain Management Subcommittee Report

Recently, there has been increasing interest on the part of physicians, regulatory agencies, legislators, the public, and patients for the proper diagnosis, timely workup, and state of the art treatment for acute, cancer, and non-cancer, chronic pain conditions. While there is widespread agreement among health care providers concerning the treatment of acute and cancer pain with opioids (also known as narcotics)--as exemplified by Federal Clinical Practice Guidelines published by the Agency for Health Care Policy and Research, U.S. Department of Health and Human Services--there has been a lack of consensus, misunderstanding and hesitation among health care providers (physicians, nurses, pharmacists), regulatory agencies, patients, and third party providers concerning the use of these same agents in the management of chronic, non-cancer pain.

Inadequate understanding about issues such as addiction, tolerance, physical dependence, and abuse has lead to unfounded stigma against proper opioid prescription. Fears of legal and regulatory sanctions or discipline from local, state, and federal authorities often result in inappropriate and inadequate treatment of chronic pain patients. Undertreatment or avoidance of appropriate opioid therapy increasingly has been reported by physicians, patients, and other health care team members.

The discipline of pain medicine has produced a new awareness about the necessity of proper diagnosis, history and physical examination, and treatment planning for the patient with chronic pain. Unfortunately, the paucity of specially trained physicians in the field of pain management often precludes patient access to specialized pain treatment facilities. The treatment for these patients will appropriately fall within the realm of the primary care or specialty physician. Until adequate guidelines are made for prescribers of opioids for patients with chronic non-cancer pain, episodes of undertreatment of this deserving population will continue.

As a result of the efforts and recommendations of the Governor's Joint Subcommittee studying pain, the Medical Society of Virginia's House of Delegates, at the 1996 annual meeting of its legislative body, recognized the lack of national consensus as well as the need for parameters concerning the proper use of opioids for patients with intractable pain of non-cancer origin within the Commonwealth of Virginia. The following guidelines are presented with the hope that they will attenuate fears about professional discipline, encourage adequate and proper treatment of chronic pain with all appropriate therapies, and educate about and protect patients as well as the general public from unsafe or inappropriate prescribing patterns or abuses.

The Society believes that physicians have an obligation to treat patients with intractable pain and to lessen suffering and that opioids may be appropriately and safely prescribed for many acute, cancer, and chronic pain conditions as long as acceptable protocols and standards are closely followed. The Society feels that physicians should be encouraged to prescribe, dispense, and administer opioids when there is demonstrated medical necessity and proper indication for these agents without fear of discipline, excessive scrutiny, or remunerative or restrictive legal penalties. These guidelines should not be interpreted as absolute standards of care in the treatment of chronic pain patients, nor are they absolute directives for clinical practice. Rather, they are guidelines by which, all physicians may more safely and comfortably evaluate and treat this very problematic and needy group of patients.

MEDICAL SOCIETY OF VIRGINIA'S GUIDELINES FOR THE USE OF OPIOIDS IN THE MANAGEMENT OF CHRONIC, NON-CANCER PAIN

For the purposes of this document the following terms shall have the following definitions:

Addiction is a disease process involving use of opioid(s) wherein there is a loss of control, compulsive use, and continued use despite adverse social, physical, psychological, occupational, or economic consequences.

Substance abuse is the use of any substance(s) for non-therapeutic purposes; or use of medication for purposes other than those for which it is prescribed.

Physical dependence is a physiologic state of adaptation to a specific opioid(s) characterized by the emergence of a withdrawal syndrome during abstinence, which may be relieved in total or in part by re-administration of the substance. Physical dependence is a predictable sequelae of regular, legitimate opioid or benzodiazepine use, and does not equate with addiction.

Tolerance is a state resulting from regular use of opioid(s) in which an increased dose of the substance is needed to produce the desired effect. Tolerance may be a predictable sequelae of opiate use and does not imply addiction.

Withdrawal syndrome is a specific constellation of signs and symptoms due to the abrupt cessation of, or reduction in, a regularly administered dose of opioid(s).

Opioid withdrawal is characterized by three or more of the following symptoms that develop within hours to several days after abrupt cessation of the substance: (a) dysphoric mood, (b) nausea and vomiting, (c) muscle aches and abdominal cramps, (d) lacrimation or rhinorrhea, (e) pupillary dilation, piloerection, or sweating, (f) diarrhea, (g) yawning, (h) fever, (i) insomnia.

Acute pain is the normal, predicted physiological response to an adverse (noxious) chemical, thermal, or mechanical stimulus. Acute pain is generally time limited and is historically responsive to opioid therapy, among other therapies.

Chronic pain is persistent or episodic pain of a duration or intensity that adversely affects the function or well being of the patient, attributable to any non malignant etiology.

ASSESSMENT, DOCUMENTATION, AND TREATMENT

A. History and Physical Examination: The physician must conduct a complete history and physical exam of the patient prior to the initiation of opioids. At a minimum the medical record must contain documentation of the following history from the chronic pain patient:

1. Current and past medical, surgical, and pain history including any past interventions and treatments for the particular pain condition being treated.

2. Psychiatric history and current treatment.

3. History of substance abuse and treatment.

4. Pertinent physical examination and appropriate diagnostic testing.

5. Documentation of current and prior medication management for the pain condition, including types of pain medications, frequency with which medications are/were taken, history of prescribers (if possible), reactions to medications, and reasons for failure of medications.

6. Social/work history.

B. Assessment: A justification for initiation and maintenance of opioid therapy must include at a minimum the following initial workup of the patient:

1. The working diagnosis (or diagnoses) and diagnostic techniques. The original differential diagnosis may be modified to one or more diagnoses.

2. Medical indications for the treatment of the patient with opioid therapy. These should include, for example, previously tried (but unsuccessful) modalities/medication regimens, diverse reactions to prior treatments, and other rationale for the approach to be utilized.

3. Updates on the patient's status including physical examination data must be periodically reviewed, revised, and entered in the patient's record.

C. Treatment Plan and Objectives: The physician must keep detailed records on all patients, which at a minimum include:

1. A documented treatment plan.

2. Types of medication(s) prescribed, reason(s) for selection, dose, schedule administered, and quantity.

3. Measurable objectives such as:
   a. social functioning and changes therein due to opioid therapy.
   b. activities of daily living and changes therein due to opioid therapy.
   c. adequacy of pain control using standard pain rating scale(s) or at least statements of the patient's satisfaction with the degree of pain control.

D. Informed Consent and Written Agreement for Opioid Treatment: Written documentation of both physician and patient responsibilities must include:

1. Risks and complications associated with treatment using opioids
2. Use of a single prescriber for all pain related medications.
3. Use of a single pharmacy, if possible.
4. Monitoring compliance of treatment:
   a. Urine/serum medication levels screening (including checks for non-prescribed medications/substances) when requested.
   b. Number and frequency of all prescription refills.
   c. Reason(s) for which opioid therapy may be discontinued (e.g. violation of written agreement item(s)).

E. Periodic Review: Intermittent review and comparison of previous documentation with the current medical records are necessary to determine if continued opioid treatment is the best option for a patient. Each of the following must be documented at every office visit:

1. Efficacy of Treatment
   a. Subjective pain rating (e.g. 0-10 verbal assessment of pain)
   b. Functional changes.

i. Improvement in ability to perform activities of daily living (ADL's).
ii. Improvement in home, work, community, or social life.

2. Medication side effects.

3. Review of the diagnosis and treatment plan.

4. Assessment of compliance (e.g. counting pills, keeping record of number of medication refills, frequency of refills, and disposal of unused medications/prescriptions).

5. Unannounced urine/serum drug screens and indicated laboratory testing, when appropriate.

F. Consultation: Most chronic non-cancer patients, like their cancer pain counterparts can be adequately and safely managed by most physicians without regard for specialty. However, the treating physician must be cognizant of the availability of pain management specialists to whom the complex patient may be referred. The physician must be willing to refer the patient to a physician or a center with more expertise when indicated or when difficult issues arise. Consultations must be documented. The purpose of this referral should not necessarily be to prescribe the patient opioids.

G. Medical Records: Accurate medical records must be kept, including, but not limited to documentation of:

a. All patient office visits and other consultations obtained .
b. All prescriptions written including date, type(s) of medication, and number (quantity) prescribed.
c. All therapeutic and diagnostic procedures performed.
d. All laboratory results.
e. All written patient instructions and written agreements.

SUMMARY AND CONCLUDING REMARKS

The treatment of patients with chronic, non-cancer pain should not be limited to pain specialists only. Because of complex social, regulatory, ethical, and legal issues surrounding the use of opioids in these patients, the physician who elects to help treat these patients may find it useful to utilize the guidelines and examples outlined in this document. While these guidelines do not define standard of care, it is the hope of the Medical Society of Virginia, working in close conjunction with the Virginia Board of Medicine, and the Commonwealth of Virginia's Joint Subcommittee to Study the Commonwealth's Current Laws and Policies Related to Chronic, Acute, and Cancer Pain Management, that physicians who do treat this very difficult and deserving patient population will find significant clinical benefit from this document and will be enlightened by the suggestions offered herein.

This document is the product of the Medical Society of Virginia's Ad Hoc Subcommittee on the Treatment of Chronic Non-Cancer Pain and is the result of many months of deliberation and study. Members of this committee were Stephen P. Long, MD, Chairman; John Barsanti, MD; Edwin Harvie, MD; Albert Jones, MD; Katherine Maurath, MD; Randolph Merrick, MD; John Rowlingson, MD; Paul Spector, DO; John Tietjen, MD; Thomas Wash, MD. *Ex Officio* members were Senator Jane Woods; and Delegate Vincent Behm; Warren Koontz, MD (Executive Director, Virginia Board of Medicine); Karen Perrine, Esquire (Virginia Board of Medicine); Norma Szakal, Esquire (Division of Legislative Services).