

# PRACTICAL Palliative Care Today

A Professional Newsletter of San Diego Hospice and Palliative Home Healthcare

Volume 1, Summer 1999

## The Dynamic Aspects of Pain

*"We all must die. But if I can save him from days of torture, that is what I feel is my great and ever new privilege. Pain is a more terrible lord of mankind than even death himself."*—Albert Schweitzer

### The Definition of Pain

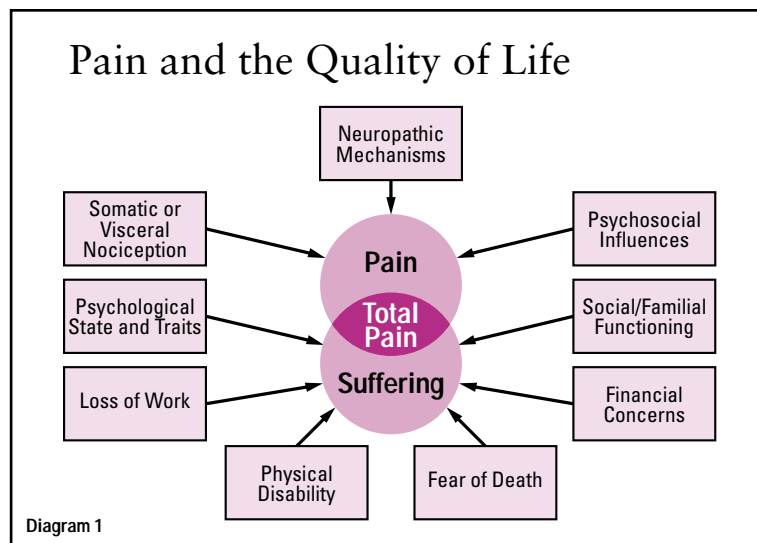
This discussion of pain and its management necessarily begins with an attempt to define pain. The Oxford Dictionary defines pain as, "the range of unpleasant bodily sensations produced by illness or by harmful physical contact." The Random House Dictionary broadens the definition to include, "bodily, mental, or emotional suffering as due to injury or illness."

From a more literary point of view, John Milton in *Paradise Lost* wrote, "Pain is a perfect misery, the worst of evils, and excessive. It overturns all patience."

The most practical definition, however, comes from Margo McCaffery, RN: "*Pain is whatever the patient defines it to be.*" This definition reinforces the fact that pain, particularly chronic pain, is a subjective experience without objective signs and symptoms that can be relied upon to accurately judge a patient's pain. As health care providers, we must believe the reports of our patients.

### The Impact of Pain Management

Pain influences the quality of life, ability to function, and



even the length of survival of individual patients.

From the diagram it can be seen that pain and suffering are linked, and that where they overlap, a condition of total pain results. While it is important to control and inhibit nociceptive and neuropathic physical mechanisms in order to relieve pain, it is at least equally important to recognize and help with other factors such as fear, physical disability, loss of income, family and social dysfunction, and psychological influences.

Pain is commonly multidimensional with overlay of at least three emotions: anxiety, depression, and anger. Many

patients are anxious because they fear uncontrollable pain, loss of control, and death. They become depressed because of multiple losses: physical ability, disfigurement, social position and employment and financial problems. It has been said by Michael Kearney, M.D., that: **Depression = Soul Pain**

Pain patients are also very angry and irritable. They resent the fact of their illness and are particularly frustrated with the failure of medicine to cure them.

It is nearly impossible as an individual health care provider to deal effectively with all

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# A Little Book of Nurses' Rules

Rosalie Hammerschmidt, RN

Clifton K. Meador M.D.

## RULE 10:

The only way to determine

a patient's needs is to:

Listen, Look carefully, and

Ask good questions.

## RULE 17:

All patients want pain

shots at the same time.

## From the desk of the editor ...

**P**ain is certainly one of the most distressing symptoms and most common complaints of our patients at San Diego Hospice. It must and can be controlled so that our significantly ill patients may complete their lives and meet their psychosocial, emotional, and spiritual needs. In fact, we believe that state-of-the-art pain control should become the standard of care for all patients, including those with non-life-threatening illnesses.

The next several issues of *Practical Palliative Care Today*, the professional newsletter of San Diego Hospice and San Diego Palliative Home Healthcare, will be dedicated primarily to the topic of pain management. We've chosen to break up this important subject into smaller segments over several issues so as not to overwhelm our readers. The volume of material simply is a reflection of the wealth of information now available and the myriad interventions that may be applied to relieve pain. Collectively, these next several issues of our newsletter will form a monograph on pain management that you may reference as needed, should you choose to save them. We hope the information presented here will assist you and your patients.

In this issue, you'll find general information on pain and its impact and meaning. We'll also discuss comprehensive pain assessment and management. In light of this issue's

emphasis on pain management, you'll find an article on acupuncture in the section titled *Integrative Palliative Care*. Interestingly, acupuncture is also useful in managing distressing symptoms other than pain.

A brief description of San Diego Palliative Home Healthcare will introduce you to our newest, emerging program, designed for individuals with fatal chronic diseases who do not wish or who do not qualify for hospice care. We are very excited about its potential growth and its role in helping to fill the need of caring for more patients palliatively.

In *Meet the Staff*, two more of our physicians' biographies are presented. Finally, from *A Little Book of Nurses' Rules*, Clifton Meador and Rosalie Hammerschmidt offer more words of wisdom.

As editor of this newsletter, I am always interested in your opinions and contributions if you have any. Please let me know how we are doing. Don't be shy.

Again, I look forward to sharing ideas and to working with you and your patients served by San Diego Hospice and San Diego Palliative Home Healthcare. I hope you enjoy this newsletter.



**Michael E. Frederich, M.D., Editor**

## Meet the Staff

*In this column, we will introduce some San Diego Hospice staff members.*

### **Laurel Herbst, M.D.**

To many of you, Laurel Herbst, M.D., the most senior of our physicians, needs no introduction. As founding medical director for San Diego Hospice, and currently vice president for medical affairs, Laurel has become a true physician leader, not just here in San Diego, but nationally in the world of hospice and palliative medicine.

Laurel completed medical school at the University of Southern California, an internal medicine residency at the Los Angeles County-USC Medical Center, and a fellowship in hematology and oncology at the San Francisco Veterans Administration Hospital. She holds an academic appointment of clinical professor (non-salaried) with the University of California-San Diego School of Medicine.

Laurel is also a founding member of

the Academy of Hospice Physicians and is certified by the American Board of Hospice and Palliative Medicine. She served as a board member and president of the American Academy of Hospice and Palliative Medicine (AAHPM) and is currently the AAHPM representative to the AMA. Additionally she has worked with the National Board of Medical Examiners to develop questions about palliative care to be included in the licensing examinations required of every physician.

Laurel says that life began for her in 1954 when her family moved from Ohio to San Diego. Somewhat of a prodigy, she completed high school simultaneously while tackling her first year of college. She married a fellow medical student who was drafted and sent to San Francisco where Laurel completed her fellowship training. The army next sent the family to Denver

where a son and identical twin daughters were born. After the marriage ended, Laurel returned to San Diego with her children in 1977.

She began working with San Diego Hospice in 1978 and opened a private practice in hematology-oncology in 1980. Laurel has been aboard for many changes in hospice care and at San Diego Hospice over the years. The medical department of San Diego Hospice now boasts more certified hospice and palliative medicine physicians than any other program in the U.S. This is a direct result of Laurel's strength and leadership.

When Laurel is not flying to various parts of the U.S. as a consultant, speaker, or committee member, she is an avid gardener. She continues in the role of single parent to three wonderful, high-achieving children that make her very proud. Laurel Herbst is the true treasure of San Diego Hospice.

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# The Art and Science of Pain Assessment

## Pain Management: Where to Start

The first step in pain management is pain assessment. This may be particularly difficult in an inarticulate or cognitively impaired patient. Nonetheless, it is a critically important step in diagnosis and cannot be overlooked.

Here are two mnemonics that are useful to ensure comprehensive pain assessment:

- P** Palliative or provocative features
  - Q** Quality (word descriptors)
  - R** Referral, region, radiation
  - S** Severity (intensity)
  - T** Temporal features
- or
- O**nset
  - L**ocation
  - D**uration
- 
- C**haracter
  - A**lleviating/aggravating factors
  - R**adiation
  - T**emporal pattern
  - S**everity

In opening the patient interview it is often more helpful to ask, “Where do you hurt?” instead of “Do you have pain?” By asking your patient the first question it gives permission to tell you more and avoids the potential for stoicism to rule that interaction. It simply does not allow the patient to deny the pain. This approach also allows the patient the opportunity to describe each of several pains they are likely experiencing. The complete pain assessment needs to be completed for each individual discomfort.

Asking the patient when and how each pain started, where it is located (including radiation), and its duration is fundamental. Describing its quality and character, alleviating (palliative) and aggravating (provocative) factors, and the temporal pattern is often helpful in differentiating mechanisms causing the pain.

## Nociceptive vs. Neuropathic Pain

Diagnosing the source and mechanism of the pain, and especially differentiating neuropathic and nociceptive mechanisms is crucial to good pain management. This is especially true because management modalities and medications effective for one type of pain (i.e., nociceptive) are ineffective for the other (i.e., neuropathic).

Nociceptive pain involves activation of nociceptors by chemical or

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*Diagnosing the source and mechanism of the pain, and especially differentiating neuropathic and nociceptive mechanisms is crucial to good pain management.*

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mechanical stimulation. Somatic pain (including bone pain) and visceral pain are the most common sub-types of nociceptive pain. In general, this type of pain is responsive to opioids.

Neuropathic pain is that caused by direct invasion of or injury to nerve. Often this pain is described as burning or stinging in nature, follows a dermatomal pattern if peripheral, and is characterized by allodynia (an exaggerated pain sensation out of all proportion to the stimulus.) Mechanisms include peripheral involvement (e.g., post-mastectomy), central involvement (e.g. celiac plexopathy) and sympathetic involvement (e.g., reflex sym-

pathetic dystrophy.) In general, this type of pain is resistant to opioids and requires adjuvant therapies to manage successfully.

## Pain Severity

Assessing the severity of pain is most often accomplished through the use of pain scales.

Research has validated the accuracy of visual analog scales when one patient is involved. Inter-patient consistency and accuracy simply does not exist. More commonly, most health care providers simply ask the patient to rate their pain on a scale of 0 to 10 where 0 is no pain and 10 is equivalent to the worst pain they have ever experienced.

At times it is difficult to assess the accuracy of the patient response. It is a difficult task at least to expect anyone to put a number on such a subjective individual experience as pain. Many patients frankly guess at a number to satisfy the health care provider. It is therefore dangerous to prescribe dosages of medications based on the severity of pain indicated by the patient alone. It is easier as will be discussed later to place control in the hands of the patient and trust them to take medication as needed to control their pain: the basis of patient-controlled analgesia.

## Ongoing Assessment

Assessment of pain needs to be ongoing because often old pain syndromes change and new pain syndromes arise. Just increasing the dosage of pain medication is often inadequate.

*Remember: Morphine rarely relieves pain from urinary retention, but a urinary catheter usually works wonders.*

# The Basics of Chronic Pain Management

*In managing chronic pain, it is important to treat the underlying disease simultaneously. There is no reason to delay pain treatment while the patient is being worked up and treatment plans finalized and implemented.*

## Non-invasive Modalities

The best noninvasive system of chronic pain management is the Lamaze system applied to obstetrical care. Several elements of Lamaze are useful when extracted for use in chronic pain patients.

Fostering and nurturing a positive attitude on the part of the patient is paramount. Without the strong belief that pain can and will be relieved, the patient may consciously or unconsciously undermine the treatment regimen or fail to comply or adhere with the medication schedule prescribed.

A positive-attitude, attention-getting device is to prescribe a loading dose of opioid medication. While physiologically beginning the saturation of opioid receptors, the complete relief of pain that is often obtained makes the patient a believer. Once he or she experiences complete pain relief from this dose, the patient rationally believes relief can be complete. This is particularly effective when prescribing approximately thirty milligrams of oral morphine sulfate to a patient who has only taken smaller dosages of weaker opioids and never had complete pain relief. Of course, morphine is to be used with caution in the elderly or those with renal impairment.

Another part of the Lamaze system is focused attention, or “getting the patient’s mind off the pain.” Pain is often worse at night when the patient has no distractions. Keeping the patient active and functioning may help. The single best attention-getting device, however, is a new grandson or granddaughter. It is absolutely futile to try to assess or manage pain when the new grandparent is holding that child! If we could only give all chronic pain patients such a gift.

## Integrative Therapy Techniques

Many techniques are useful non-pharmacological adjuvants in managing chronic pain. Sometimes called alternative or complementary techniques, the integration of these therapies into the pain management program of our patients is often very helpful.

Neurostimulation through the use of acupuncture, massage and TENS units has been shown to be effective. Diversional therapies such as art and music therapy and specialized techniques such as biofeedback, hypnosis, and meditation have helped. Behavioral modification techniques of guided imagery, relaxation, and aromatherapy have been particularly useful at San Diego Hospice.

## WHO did it! AHCPR confirmed it!

The World Health Organization (WHO) has been interested in chronic pain management for many years. In 1990, its expert Committee on Cancer

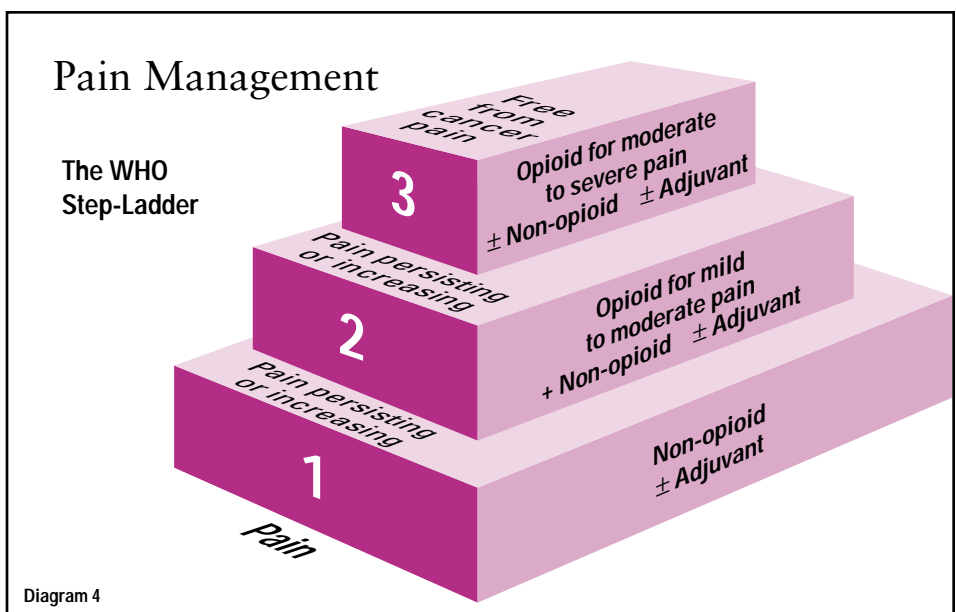
Pain Relief and Palliative Care endorsed a three-step analgesic ladder approach to the pharmacological management of cancer pain.

When the U.S. Department of Health and Human Services’ Agency for Health Care Policy and Research (AHCPR) developed a clinical practice guideline for management of cancer pain in 1994, they endorsed the same three-step approach. Both agencies endorsed the routine prescription of strong opioids in the management of cancer pain.

The approach advocated by WHO and AHCPR does not just endorse the prescription of opioids alone for pain management, however. The prescription of non-opioid anti-inflammatory medications and adjuvant analgesics alone or in combination with opioids titrated to the needs of the individual patient is recommended for best pain management.

The step-ladder begins with non-opioid analgesics at

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# Administrative Issues

*In this column, we discuss and address administrative issues in hospice and palliative medicine. In this issue, we'll introduce a new program that extends palliative care to patients who are not necessarily terminally ill.*

## **What is San Diego Palliative Home Healthcare?**

San Diego Palliative Home Healthcare (SDPHH) is a program focused on symptom management and pain relief for patients who meet home healthcare criteria. Admissions criteria for palliative home healthcare include the patient having a skilled nursing need, and being homebound (Medicare and Medi-Cal only). The homebound requirement excludes short trips for necessities, such as physician visits. Travel must be difficult and require special arrangements (e.g., wheelchair). Unlike hospice care, the admissions criteria for palliative home healthcare does not include a prognosis time limit of six months or less. This allows us to serve patients with uncertain prognoses or who may be reluctant to accept "hospice" care.

One of the major differences between palliative home healthcare and traditional home healthcare programs is that we expect to serve patients with fatal chronic illnesses. Our focus is on patients with severe heart disease, lung disease, HIV disease, cancer, and/or severe neurologic disease who would benefit from disease specific management and relief from pain and suffering caused by distressing symptoms. Specialized palliative home healthcare teams are being formed, and algorithms and protocols for care are being defined for each of these disease categories.

SDPHH is not designed to compete with other home healthcare agencies. If a patient is actively seeking rehabilitation—for example, following a fractured femur—this program is not the answer. It is also unlikely that a patient will be cared for by this program if s/he does not have a fatal

chronic disease. Otherwise, interventions and treatment options are nearly unlimited, unless it is our feeling that we are unable to deliver the care adequately and safely.

We are currently hiring experienced staff in the specialty areas and training them in the nuances of palliative care. With the help of local specialist consultants, SDPHH staff has begun to provide the best care available to a select group of home healthcare patients. In this way, we hope to create a new hybrid that will bring the best of traditional care and palliative care expertise to our patients.

## **What kind of care is provided by San Diego Palliative Home Healthcare?**

The simple answer is expert, compassionate care for patients with fatal chronic illnesses. The care consists of in-home nursing visits on a routine basis and frequent telephone contacts for disease management and education. Social worker visits are also

available through the program.

An added value is the availability of San Diego Hospice physicians to serve as consultants and experts in pain and symptom management. Home visits and outpatient visits may be scheduled for consultations about specific problems or overall disease management strategies.

The algorithms and protocols that are being developed both reflect current community standards and serve as educational tools to improve the management of fatal chronic diseases. With continual input from specialty experts, the standards of practice will be modified on an ongoing basis to reflect new interventions, medications, and revisions of medical thinking and opinion.

We have set high expectations and standards for this program, and value your input and opinions about this effort. Please give us the opportunity to assist you in providing the best of care to your patients and families through San Diego Palliative Home Healthcare.

**For information about the SDPHH program or to refer a patient, call 619-688-1104, ext. 273.**

## **Meet the Staff**

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### **Charles Lewis, M.D.**

The second ranking San Diego Hospice physician in longevity, Charles Lewis, M.D., has been employed by San Diego Hospice since 1991. Following medical school at Washington University in St. Louis, Missouri, Charles practiced family medicine and allergy in St. Louis before entering the field of palliative medicine.

While practicing in St. Louis, Charles studied comparative literature and poetry. He maintains an interest in the humanities as a discipline to use in understanding suffering and the individual human response to it.

At San Diego Hospice, Charles has been very active in developing an integrative palliative care program. His interest includes all areas of complementary medicine, particularly acupuncture, aromatherapy,

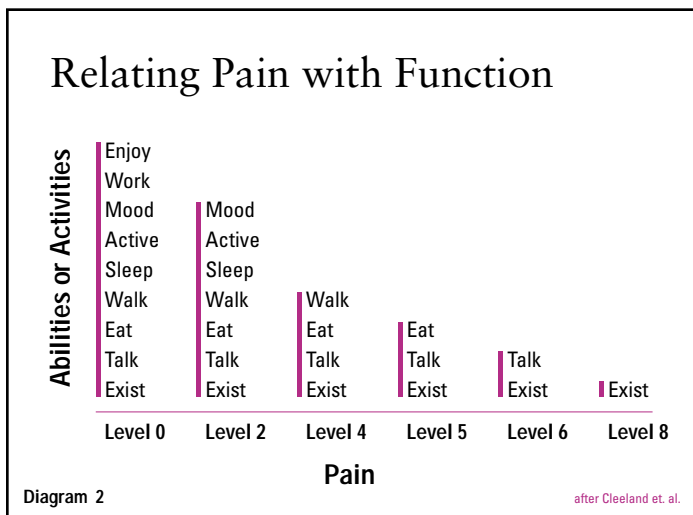
energy therapy, herbology, music therapy, prayer and meditation. He is interested in outcomes measurement research to validate these interventions. Charles is a lay minister in Soto Zen and has been involved in Zen for fifteen years. He founded the Buddhist Physicians Group in San Diego which meets monthly to discuss spiritual issues and self-awareness.

Currently, Charles serves San Diego Hospice as Assistant Vice President of Medical Affairs, Director of Professional Education, Director of the Inpatient Care Center, and Director of Integrative Palliative Care. This begs the question of what he does in his spare time. His sense of humor is evident when he says his outside interests are mainly sleeping and eating. When pushed, however, he does admit to experiencing joy in traveling, hiking and reading.

these issues. Realistically it is only by working in an interdisciplinary team built with physicians, nurses, social workers, chaplains, and volunteers that we are able to relieve the patient of total pain.

Pain also relates to function. As can be seen from diagram 2, when patients have little or no pain they are able to enjoy life, work, sleep well, and be as active as they wish. However, when pain is consistently severe, they may be completely immobilized by it and able to exist only at a minimal level—this may lead to bed confinement. Obviously the goal is to reduce pain to promote function.

Incredible as it may seem, excellent pain control can prolong survival and extend life. In a prospective, random-



ized, double-blind study comparing intraoperative chemical splanchnicectomy with alcohol versus a placebo injection, Lillemoe et. al. found that patients with pre-existing pain who received alcohol showed a significant improvement in survival when compared with controls ( $p < 0.0001$ ).

Diagram 3 illustrates this nicely showing no placebo injected patients surviving six months while several receiving alcohol injections survived a year or more.

A study involving a rat tumor model (Page GG, et. Al. Morphine Attenuates Surgery Induced Enhancement of Metastatic Colonization in Rats. Pain. 1993;54:21-28.) found that painful stressors such as surgery have been shown both to suppress immune function and to enhance tumor development. An analgesic dose of morphine administered to the rats blocked the surgery induced increase in metastasis. By reducing pain which enhances immune function, metastatic spread of disease can be impeded.

### The Meaning of Pain

Eric Cassell has stated that the meaning of pain is the most important psychological component of pain. Its meaning varies for the patient, family, and caregivers. To the patient it is a reminder of the illness, forcing memory of the sick role. To a dying patient it is a death nell. Charles vonGunten has written, “not infrequently, patients express greater concern about the diagnostic/prognostic meaning of pain than about its control.”

*The perceived meaning of pain influences the amount of medication that will be required to control*

*it...the suffering of patients with terminal cancer can often be relieved by demonstrating that the pain truly can be controlled.<sup>1</sup>*

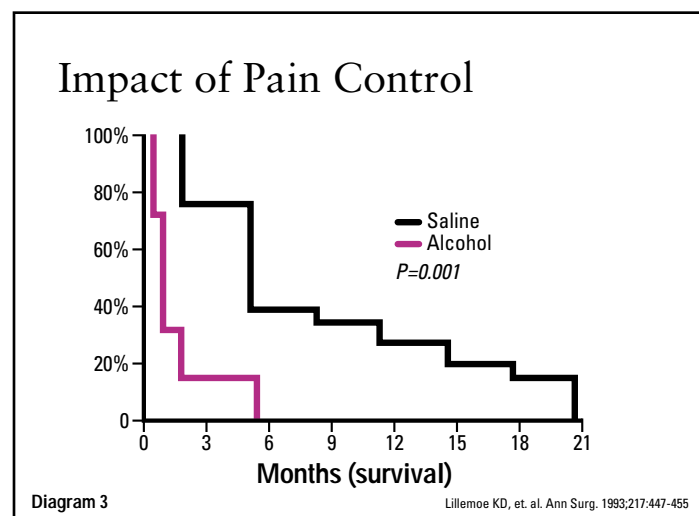
To the family and caregivers, failure to control pain often stimulates a sense of frustration and inadequacy to relieve suffering of a loved one. This may lead to avoidance behaviors.

### Acute Pain vs. Chronic Pain

Acute and chronic pain are very different from each other. Most health professionals personally experience acute pain more commonly than chronic pain and should be wary of comparing their acute pain personal experience to that of their patients with chronic pain.

Acute pain is usually event specific. For example, you touch something hot and burn your hand. The duration of the pain is predictable and limited and the pain tends to diminish as healing occurs. It also serves a purpose and has meaning—you learn never to touch something hot again. Acute pain is usually accompanied by signs of autonomic (sympathetic) nervous system arousal including: tachycardia, hypertension, diaphoresis, pallor and mydriasis. These objective signs are present and useful only in assessing acute pain.

Chronic pain is usually situation specific. Often, the situation is chronic pain caused by cancer. The duration of the pain is unpredictable and often never stops. As the disease spreads, the pain intensifies. This pain also serves no purpose and indeed often has a negative meaning to the patient: it is a stark reminder of advancing disease. Somewhat confusingly, there are no objective signs of autonomic nervous system arousal associated with chronic pain. This confusing lack of signs may lead inexperienced caregivers to discount the patient’s self-report of pain. This may lead to reluctance to prescribe adequate dosages of medication, leading to unrelieved pain, increased suffering, diminished function, decreased quality



ty of life, and shortened survival.

In chronic pain management, we must believe the report of the patient.

<sup>1</sup>Cassell, “The Nature of Suffering and the Goals of Medicine.” NEJM 1982;306.

# Integrative Palliative Care

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**T**he San Diego Hospice Integrative Palliative Care Team continues to organize and draw together individuals within San Diego Hospice and in the community to further learn about and apply integrative medicine techniques to the care of our terminally ill patients. The word *integrative*—versus *complementary* or *alternative*—was specifically chosen because these therapies are integrated into the plan of care to complement traditional modern American palliative medicine. They do not stand alone. In this issue, acupuncture is discussed.

## Acupuncture

In January 1998, San Diego Hospice joined forces with the Pacific College of Oriental Medicine to provide acupuncture and Oriental therapeutic massage to hospice patients. Since that time, interns in the third or fourth year of their master's degree program have worked with patients at the San Diego Hospice Inpatient Care Center three mornings per week under the direct supervision of a licensed acupuncturist.

Acupuncture is an ancient system of healing developed as part of the traditional medicine of China, Japan, and other Eastern countries. It is a treatment that utilizes fine needles placed in specific points on the body. These points were discovered by empirical investigation over thousands of years and have been found to have the effect of restoring homeostasis or equilibrium in the body, which in turn promotes healing and provides symptom relief.

Acupuncture is particularly helpful in treating symptoms such as pain, poor appetite, anxiety, constipation, nausea, and insomnia; all of which are very common in hospice patients.

To date, the program has been well received by patients, their families, and hospice staff. The patients enjoy the treatments, often commenting that they promote a sense of well-being and relaxation in addition to reducing

suffering from symptoms. Many of the patients' families report that despite initial skepticism, acupuncture treatments have positively affected their loved one's quality of life.

The Interns from the Pacific College of Oriental Medicine have also benefited from practicing at San Diego Hospice. Jill Blakely, one of the interns wrote the following:

*I have learned that Chinese Medicine is powerful and can bring*

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*Acupuncture is particularly helpful in treating symptoms such as pain, poor appetite, anxiety, constipation, nausea, and insomnia; all of which are very common in hospice patients.*

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*relief to people no matter how sick they are. I have also learned that, like all medicine, it has limitations and that I cannot solve everything. One of my first patients was a woman, dying of breast cancer, whose husband and young child were staying at the hospice inpatient center with her. During the intake she described her physical discomfort, her fear of dying, and her anger at having to leave her small child. I felt so inadequate in the face of her suffering and as I put in the acupuncture needles, I wondered if I was really helping her. Afterwards, as I massaged her feet, she told me how much more comfortable and peaceful she felt. I learned that I could not change her situation but that I could affect her relationship with her circumstances and it felt good to be able to help.*

The acupuncture program at San Diego Hospice has exceeded expectations. In part, this has led to the creation of a collaborative research project between the Pacific College of Oriental Medicine and San Diego Hospice which will examine, by means of a controlled study, the effect of acupuncture on quality of life at the end of life. It is hoped that this study will help validate acupuncture as a useful adjunct to conventional western medicine in the treatment of hospice patients.

step one. If these agents alone do not control the pain, a second step weak opioid is to be added to the non-opioid. In patients with severe pain who are not relieved, or whose dose of weak opioid is maximized, the weak opioid should be discontinued and a step three strong opioid started in its place, and titrated to comfort. Adjuvant medications may be added in any of the three steps for neuropathic pain.

Principles of the step-ladder include dosing by the mouth, by the ladder, by the clock, for the individual with attention to detail. Medications are administered with patient control by the easiest route (orally), given routinely at appropriate dosage interval, and with allowances made for individual variation.

### **Step One: Anti-inflammatory, not Non-opioid**

Step one medications are indicated and intended to manage pain injury at the site of tumor or damage. For this reason, anti-inflammatory medications are much more effective than non-opioids such as acetaminophen. Acetaminophen can do nothing to reduce inflammation because it is neither a non-steroidal anti-inflammatory drug, salicylate, nor corticosteroid. It is also toxic in relatively low dosages of three to five grams per day and is particularly harmful in patients with renal or hepatic disease.

Non-steroidal anti-inflammatory drugs (NSAIDs) are the most commonly prescribed step one medications. They are particularly effective in managing any inflammatory condition, especially in metastatic bone tumors. The mechanism of action of most NSAIDs is cyclo-oxygenase (COX) and prostaglandin inhibition. These mechanisms lead to toxicities and side-effects of gastropathy, fluid retention, renal failure, and platelet dysfunction. Newer COX-2 inhibitors may have less toxicity and side-effects.

Salicylates are also useful step one medications. While aspirin is generally avoided due to toxicity and fear of peptic ulceration, choline magnesium trisalicylate is often useful because of its lower gastrointestinal toxicity, twice per day dosing, available liquid formulation, and absence of any interference with platelet aggregation.

Another class of step one medication is particularly useful in hospice care. Corticosteroids may be prescribed with no fear of long term side-effects due to the patient's short life expectancy. Dexamethasone is particularly helpful in managing multiple symptoms including dyspnea, anorexia, bowel obstruction, cerebral edema, and acute nerve compression in addition to the anti-inflammatory effect that is useful for pain management. For this reason, it is often prescribed in lieu of NSAIDs or salicylates.

