Pain Management in Cancer Patients

19th Miami Cancer Meeting (MCM)

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Dennis J. Patin, MD

Associate Professor of Clinical Anesthesiology
University of Miami Miller School of Medicine
Division Chief Department of Anesthesiology, Perioperative Medicine, and Pain Management
UM Sylvester Comprehensive Cancer Center
Miami, Florida
USA

SYLVESTER COMPREHENSIVE CANCER CENTER
UNIVERSITY OF MIAMI HEALTH SYSTEM

UNIVERSITY OF MIAMI
MILLER SCHOOL of MEDICINE

“We must all die. But that I can save a person from days of torture, that is what I feel as my great and even new privilege. Pain is a more terrible lord of mankind than even death itself.”

Albert Schweitzer

University of Miami
Miller School of Medicine

News

UM/Jackson Pain Management Fellowship Program Receives Competitive Award

4.01.2014

The University of Miami/Jackson Memorial Hospital Pain Medicine Fellowship Program is the recipient of the 2014 Pain Medicine Fellowship Excellence Award from the American Academy of Pain Medicine (AAPM).

This is the first time the program has won the highly competitive award, which annually recognizes one program among all ACGME accredited institutions in the United States.

The award honors the UM/Jackson program for providing an exceptional learning experience to fellows, preparing them to deliver the highest standard of care to patients with pain, and for emulating the AAPM's mission to optimize the health of patients in pain and advance the practice and specialty of pain medicine. In addition to complimentary registrations for two fellows to attend the AAPM's annual meeting in Phoenix, AZ, the fellowship program, led by Constantine Sarantopoulos, M.D., Ph.D., also has received recognition in *Pain Medicine*, the official journal of the academy.

"This award is a great distinction for our Pain Medicine Program and the Medical School," said Sarantopoulos, professor of anesthesiology and Chief of the Division of Pain Management. "The American Academy of Pain Medicine, through this prestigious award, has recognized our efforts to establish our pain management clinics as centers of excellence for training the new generation of pain specialist doctors. Because at the same time we teach what we practice, the award also recognizes our program as a clinical center of excellence for delivering the best possible care to patients suffering from pain, who visit us not only from the state of Florida but from all over the world."

Sarantopoulos credited "teamwork and great support" for earning the distinction.

"This recognition is the result of hard work and collaboration between departments," he said, thanking faculty and chairs from the Departments of Anesthesiology, Neurology, Physical Medicine and Rehabilitation, and Psychiatry and Behavioral Sciences for their outstanding leadership and ongoing support. Sarantopoulos also shared the recognition with his staff and fellows who helped make the program a success.

Pain Management team members are, from left, Dewayne Lockhart, M.D., Rafael Camejo, DNP ARNP, Chaturani Ranasinghe, M.D., Ramon Alegret, M.D., Michelle Francavilla, M.D., Constantine D. Sarantopoulos, M.D., Ph.D., and Dennis J. Patin, M.D.

Epidemiology of Cancer Pain

- At diagnosis, 25-50% incidence, in advanced cases, 75% incidence
- Moderate to severe in 50%, very severe in 25%
- One third each with one, two, three or more sites of pain
- 85% due to cancer, 15% related to cancer treatment or a concurrent disorder

Prevalence

- Approximately 6.7 million cancer patients are affected by pain across the 7 major markets. US, Japan, France, Germany, Italy, Spain & UK
- Incidence of CA pain is set to increase in the future. Physicians estimate 65% of all cancer patients experience cancer pain.
- The incidence of cancer is expected to rise in the future, driven by the elderly and minority populations

Assessment of Pain

- Location
- Onset
- Pattern
- Progression
- Description
- Severity

- Alleviating factors
- Aggravating factors
- Associated symptoms
- Prior work up
- Previous treatment
- Effect

Types of Pain

- Nociceptive/neuropathic
- Central/peripheral
- Somatic/visceral
- Sympathetically mediated/independent
- Cancer related
- Cancer treatment related
  - Surgical
  - Chemotherapy
  - Radiotherapy

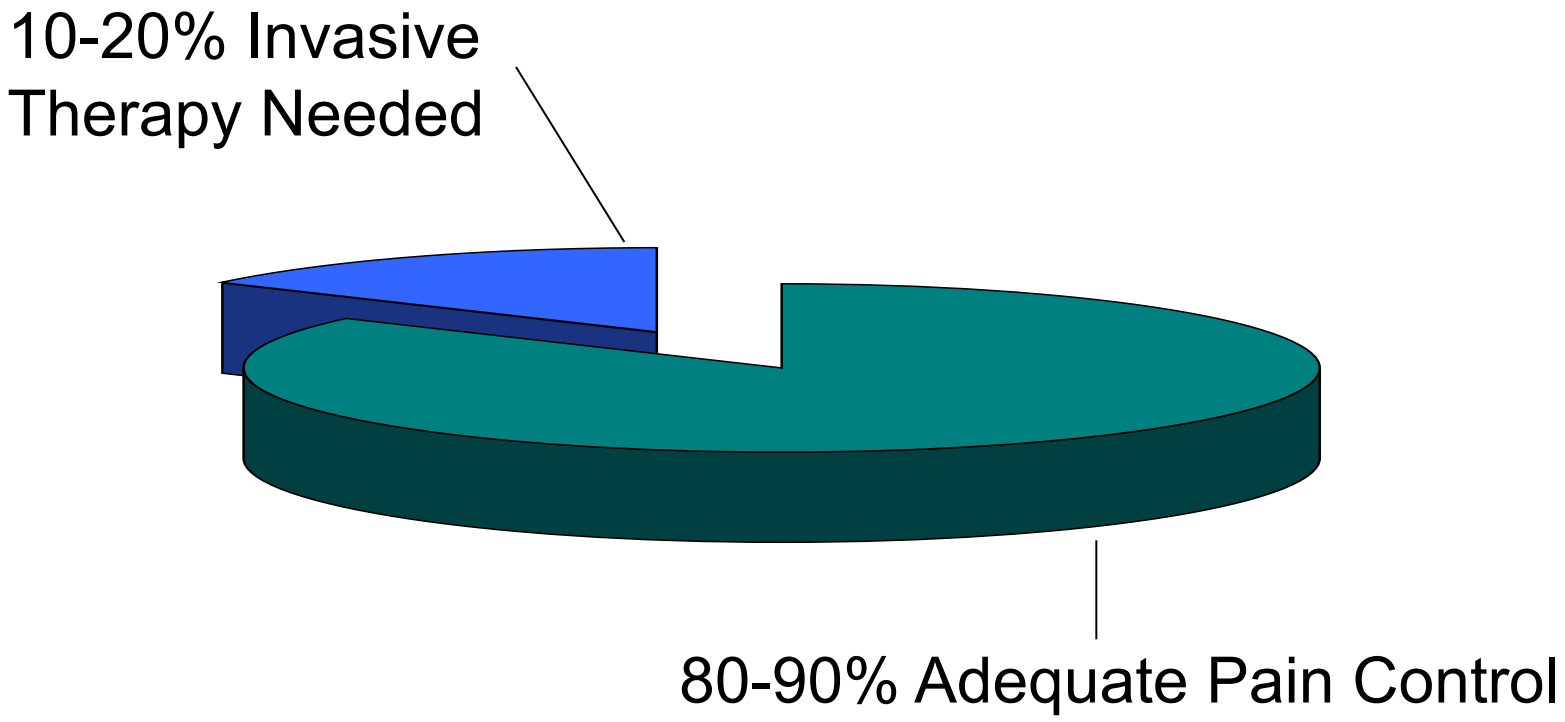
Noninvasive Pain Treatments

- Exercise
- Massage
- Chiropractic
- Physical therapy
- Acupuncture
- Transcutaneous electrical nerve stimulation
- Biofeedback
- Meditation and relaxation
- Cognitive and behavioral
- Psychotherapy
- Spiritual
- Complimentary

Invasive Pain Treatments

- Pharmacologic
- Nerve blocks
  - Diagnostic
  - Prognostic
  - Therapeutic
  - Preemptive
- Electrical neuromodulation
- Neuraxial drug administration
- Neuroablation

Advanced Strategies for Cancer Pain Management



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Guidelines

Neuromodulation: Technology at the Neural Interface

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The Polyanalgesic Consensus Conference (PACC): Recommendations on Intrathecal Drug Infusion Systems Best Practices and Guidelines

Timothy R. Deer, MD*; Jason E. Pope, MD†; Salim M. Hayek, MD, PhD‡; Anjum Bux, MD§; Eric Buchser, MD¶; Sam Eldabe, MD**; Jose A. De Andrés, MD, PhD, EDRA††; Michael Erdek, MD‡‡; Dennis Patin, MD§§; Jay S. Grider, PhD, MBA¶¶; Daniel M. Doleys, PhD***; Marilyn S. Jacobs, PhD†††; Tony L. Yaksh, PhD‡‡‡; Lawrence Poree, MD, PhD§§§; Mark S. Wallace, MD¶¶¶; Joshua Prager, MD****; Richard Rauck, MD††††; Oscar DeLeon, MD‡‡‡‡; Sudhir Diwan, MD§§§§; Steven M. Falowski, MD¶¶¶¶; Helena M. Gazelka, MD*****; Philip Kim, MD†††††††††; Michael Leong, MD§§§§§; Robert M. Levy, MD, PhD¶¶¶¶¶; Gladstone McDowell II, MD******; Porter McRoberts, MD†††††††; Ramana Naidu, MD‡‡‡‡‡‡; Samir Narouze, MD, PhD§§§§§§; Christophe Perruchoud, MD¶¶¶¶¶¶; Steven M. Rosen, MD*******; William S. Rosenberg, MD†††††††; Michael Saulino, MD, PhD‡‡‡‡‡‡‡; Peter Staats, MD§§§§§§§¶¶¶¶¶¶¶; Lisa J. Stearns, MD********; Dean Willis, MD††††††††; Elliot Krames, MD‡‡‡‡‡‡‡‡; Marc Huntoon, MD§§§§§§§§; Nagy Mekhail, MD, PhD¶¶¶¶¶¶¶¶

Introduction: Pain treatment is best performed when a patient-centric, safety-based philosophy is used to determine an algorithmic process to guide care. Since 2007, the International Neuromodulation Society has organized a group of experts to evaluate evidence and create a Polyanalgesic Consensus Conference (PACC) to guide practice.

Methods: The current PACC update was designed to address the deficiencies and innovations emerging since the previous PACC publication of 2012. An extensive literature search identified publications between January 15, 2007 and November 22, 2015 and authors contributed additional relevant sources. After reviewing the literature, the panel convened to determine evidence levels and degrees of recommendations for intrathecal therapy. This meeting served as the basis for consensus development, which was ranked as strong, moderate or weak. Algorithms were developed for intrathecal medication choices to treat nociceptive and neuropathic pain for patients with cancer, terminal illness, and noncancer pain, with either localized or diffuse pain.

Results: The PACC has developed an algorithmic process for several aspects of intrathecal drug delivery to promote safe and efficacious evidence-based care. Consensus opinion, based on expertise, was used to fill gaps in evidence. Thirty-one consensus points emerged from the panel considerations.

Conclusion: New algorithms and guidance have been established to improve care with the use of intrathecal drug delivery.

Address correspondence to: Timothy R. Deer, MD, President and CEO, The Center for Pain Relief, Inc., 400 Court Street, Ste 100, Charleston, WV, USA. Email: DocTDeer@aol.com

* Center for Pain Relief, Charleston, WV, USA;
† Summit Pain Alliance, Santa Rosa, CA, USA;
‡ Case Western Reserve University, Cleveland, OH, USA;
§ Anesthesia and Chronic Pain Management, Ephraim McDowell Regional Medical Center, Danville, KY, USA;
¶ Anaesthesia and Pain Management Department, EHC Hospital, Morges, and CHUV University Hospital, Lausanne, Switzerland;
** The James Cook University Hospital, Middlesbrough, UK;
†† Valencia School of Medicine, Hospital General Universitario, Valencia, Spain;
‡‡ Anesthesiology and Critical Care Medicine, Johns Hopkins University School of Medicine, Baltimore, MD, USA;
§§ University of Miami Health System, Miami, FL, USA;
¶¶ University of Kentucky College of Medicine, UK HealthCare Pain Services, Lexington, KY, USA;
*** Doleys Clinic, Birmingham, AL, USA;
††† California Pain Medicine Center, Los Angeles, CA, USA;
‡‡‡ Anesthesiology and Pharmacology, University of California, San Diego, CA, USA;

Perceived Barriers

- Lack of clinical evidence
- Cost effectiveness (compared to CMM)
- Lack of collaboration between oncology team & pain team
- Patient awareness & acceptance
- Awareness of therapy by oncology team

Case Study

- 62 year old man with metastatic thyroid cancer to sacrum. Pain in sacral, gluteal, perineal area. Thyroidectomy 5 years prior. On no meds.

Questions

- What type of pain is this?
- What may be associated symptoms?
- What is preferred treatment of disease?
- What are options for pain control?
- What medication or medications?
  - Adjuvants
  - Opioids
- What nerve blocks?
- Is he a candidate for neurolysis?
- What would be expected side effects of treatment?

Questions

- What if medications and nerve blocks gave insufficient relief?
- Is he a neuromodulation candidate?
- Is he an intrathecal drug delivery candidate?
- Would you perform trial?
- What medication?
- What location for catheter tip?
- What kinetic form of drug delivery?
- How would you manage tolerance?

Case study

- 52 yo Hispanic male with pancreatic cancer, non resectable.
- Failed multiple lines of chemotherapy.
- Upper abdominal, back pain.
- Cachectic, anorexic, depressed, constipated.
- Transdermal fentanyl 100 mcg/hr, oxycodone/acetaminophen 10/325 mg q 4 hrs.
- Referred to integrative medicine, psychosocial oncology.

Case study

- Started on bowel management protocol, duloxetine 30 mg/day, gabapentin 300 mg TID, dronabinol 5 mg TID, lidocaine patches.
- Given choice of transmucosal immediate relief fentanyl for breakthrough pain.
- Performed CT guided trans-aortic neurolytic celiac plexus block 30 ml dehydrated alcohol.
- Decided on intrathecal drug delivery implant.

Case study

- Pump left abdomen and catheter tip T4, posterior.
- Simple continuous rate and patient activated feature (PTM).
- Drug mixture fentanyl 200 mcg/ml, bupivicaine 20 mg/ml.
- Simple continuous rate 50 mcg/5 mg per day.
- PTM 10 mcg/1 mg per press q 2 hr.

Case study

- Complete pain relief each pt activation.
- Declining benefit from bolus, tachyphlayxis.
- Hydromorphone added to mixture 0.5 mg/ml, then clonidine 100 mcg/ml.
- Good pain relief until further disease progression and hospice enrollment.

Challenges

- Awareness
- Assessment
- Referral
- Training
- Experience
- Opioids
- Survivorship