

Managing Pain in Patients and Survivors: Challenges Within the United States Opioid Crisis

Presented by Judith A. Paice, PhD, RN

ABSTRACT

Advances in cancer treatment have led to a growing number of survivors. At least 40% of those survivors live with chronic pain and need pain control medication. This coincides with an epidemic of opioid misuse and overdose deaths, resulting in restrictive practices that can impact patients who experience severe pain. Oncologists and other healthcare professionals who treat patients with cancer need to balance considerations of opioid misuse with effective pain control and become better educated about risk factors and management of opioids in cancer survivors.

J Natl Compr Canc Netw 2019;17(5.5):595–598
doi: 10.6004/jnccn.2019.5010

“Unrelieved pain is a public health crisis, and opioid misuse and overdose deaths are emergencies. These 2 crises have converged, and unintended consequences of efforts to squelch the opioid crisis have led to challenges in pain management, including further stigma and unrelieved pain for patients with cancer, especially survivors,” explained Judith A. Paice, PhD, RN, Director of the Cancer Pain Program, Division of Hematology/Oncology, and Research Professor of Medicine, Feinberg School of Medicine, Robert H. Lurie Comprehensive Cancer Center of Northwestern University.

“Simple solutions helped create the current crisis, but comprehensive, complex solutions are needed to resolve these 2 public health crises.”

At least 40% of all cancer survivors suffer from chronic pain.¹ Pain management is a survivorship issue and needs to be addressed safely. One consequence of measures to control the opioid epidemic is a scarcity of opioids for patients with significant cancer-related pain, whether due to cutbacks in manufacturing or increased restrictions on prescribing.

The Scope of the Problem

“The opioid epidemic has exploded. The numbers of deaths from drug overdoses in the United States far surpasses the number of deaths due to motor vehicle accidents and those from gun violence,” Dr. Paice said.

Deaths due to drug overdose are more likely to occur in young persons and in men, according to the Centers for Disease Control and Prevention.²

Dr. Paice described 3 waves of deaths due to the opioid crisis. The first wave was in 1999 from prescription drug overdoses. The second wave was an increase in the number of deaths from heroin overdoses, which was documented in 2010. The third wave is due to overdoses of illicit opioids, mainly heroin and fentanyl. In fact, fentanyl was recently called the deadliest drug in America. In 2011, fentanyl overdoses claimed 1,663 lives, whereas in 2016, this number increased exponentially to 18,335.³

“Doctors and patients should know that it is not the fentanyl patch that is causing these deaths from fentanyl overdoses,” she told listeners.

In an effort to address the opioid crises, the CDC published a Guideline for Prescribing Opioids for Chronic Pain in 2016.⁴ Dr. Paice and other experts in the field took issue with these guidelines because, although they specifically exclude people with pain during active cancer treatment and end-of-life care, there are many individuals with cancer who experience pain yet do not fall neatly into these categories.

“These guidelines leave cancer survivors in a gray zone. Two of the recommendations in particular are problematic: setting the maximum equivalent dose at 50 morphine equivalents and limiting treatment for 3 days or less in most cases,” she said.

Substance Use Disorder

In the past, stigma surrounded cancer. Betty Ford was one of the first people to publicly announce that she had cancer. At the time, her announcement was front-page news, because nobody talked about cancer. This is



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INTEGRATIVE INTERVENTIONS

Consider integrative interventions in conjunction with pharmacologic interventions as needed. Integrative interventions may be especially important in vulnerable populations (eg, frail, elderly) in whom standard pharmacologic interventions may be less tolerated or based on patient preference. The utility of integrative interventions underscores the necessity for pain management to be carried out with a team approach that contains a wide range of treatment options. (See PAIN-L)

Pain likely to be relieved or function improved with cognitive, physical, or interventional modalities:

- **Cognitive modalities**
 - ▶ Mindfulness-based stress reduction
 - ▶ Imagery
 - ▶ Hypnosis
 - ▶ Biofeedback
 - ▶ Acceptance-based training
 - ▶ Distraction training
 - ▶ Relaxation training
 - ▶ Active coping training
 - ▶ Graded task assignments, setting goals, pacing, and prioritizing
 - ▶ CBT, cognitive restructuring
 - ▶ Behavioral activation
- **Physical modalities**
 - ▶ Bed, bath, and walking supports
 - ▶ Positioning instruction
 - ▶ Instruction in therapeutic and conditioning exercise
 - ▶ Energy conservation, pacing of activities
 - ▶ Massage
 - ▶ Heat and/or ice
 - ▶ Transcutaneous electrical nerve stimulation (TENS)
 - ▶ Acupuncture or acupressure
 - ▶ Ultrasonic stimulation
- **Spiritual care** (See NCCN Guidelines for Distress Management)
- **See Interventional Strategies (PAIN-M)**

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PAIN-J

Figure 1. Integrative interventions from the NCCN Guidelines for Adult Cancer Pain.

similar to how substance abuse disorder is now treated; the addicted person is stigmatized and blamed.

“Addiction is not a choice or a moral failure. Blaming the abuser leads to judgement rather than compassion,” Dr. Paice stated. Any efforts to treat substance abuse disorder need to incorporate the knowledge that relapse is part of the disease.

Few data are available on opioid addiction in patients with cancer. An older study estimates that up to 7.7% of patients with cancer are addicted.⁵ “I believe this is an underrepresentation,” she said. “I and others have been working hard to increase awareness of this problem in patients with cancer.”

In an editorial in *Journal of Oncology Practice*,⁶ Dr. Paice underscored the stigmatization associated with opioid use and the cutbacks in manufacturing of opioids and noted that >440 state bills were proposed in 2018 to deal with the crisis using education and new guidelines. Few of these bills exempted patients with cancer, she said.

Dr. Paice wrote another editorial in *Cancer*,⁷ arguing for improvements in the quality of cancer pain management. She cited barriers to patients and caregivers, healthcare professionals, and healthcare systems, which include inadequate knowledge, fear and anxiety, inadequate assessments, lack of awareness of biopsychosocial components of pain, reluctance to prescribe opioids, limited access to specialty care, limited

reimbursement, and the need for counseling and integrative therapies.

“Solutions include better education of patients and families about risks and appropriate use of opioids; better education of oncology professionals about comprehensive pain and risk assessment, tolerance, universal precautions, and regulations to guide clinical practice; and better access to data, counseling services, and addiction resources,” she said.

“Oncology colleagues have very little training in substance use disorder,” Dr. Paice continued. “We need access to addiction specialists. Even large centers have limited resources to address the problem. One need is for electronic health records to be directly linked to the prescription drug monitoring system.”

ASCO Practice Guideline

ASCO issued their Practice Guideline on Management of Pain in Survivors of Adult Cancers in 2016.⁸ This guideline focuses on people who have completed active treatment and includes key recommendations for screening and comprehensive assessment, treatment and care options, and risk assessment (including mitigation and universal precautions).

Some of the posttreatment pain syndromes cited in the ASCO guideline were not widely recognized before 2016. Chemotherapy, hormonal therapy, and radiation

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Adult Cancer Pain

INTERVENTIONAL STRATEGIES

Interventional consultation¹

- Major indications for referral:
 - ▶ Pain likely to be relieved with nerve block (eg, pancreas/upper abdomen with celiac plexus block, lower abdomen with superior hypogastric plexus block, intercostal nerve)
 - ▶ Failure to achieve adequate analgesia and/or the presence of intolerable adverse effects (may be handled with intraspinal agents, blocks, spinal cord stimulation, or destructive neurosurgical procedures)
- Commonly used interventional procedures:
 - ▶ Regional infusions (requires infusion pump)
 - ◊ Epidural: easy to place, requires the use of an externalized catheter/pump; for infusions of opioids, local anesthetics, and clonidine; useful for acute postoperative pain; use beyond several days to a few weeks is limited by concerns for catheter displacement and infection
 - ◊ Intrathecal: easy to internalize to implanted pump; for infusions of opioids, local anesthetics, clonidine, and ziconotide; implanted infusion pumps may be costly, refills require technical expertise
 - ◊ Regional plexus: for infusions of local anesthetics, to anesthetize single extremity; use beyond several days to a few weeks is limited by concerns for catheter displacement and infection
 - ▶ Percutaneous vertebroplasty/kyphoplasty
 - ▶ Neurodestructive procedures for well-localized pain syndromes (spinal analgesics are used more frequently)
 - ◊ Head and neck: peripheral neurolysis generally associated with sensory and/or motor deficit
 - ◊ Upper extremity: brachial plexus neurolysis
 - ◊ Thoracic wall: epidural or intrathecal, intercostal, or dorsal root ganglion neurolysis
 - ◊ Upper abdominal pain (visceral): celiac plexus block, thoracic splanchnicectomy
 - ◊ Pelvic pain: superior hypogastric plexus block
 - ◊ Rectal/perineal pain: intrathecal neurolysis, midline myelotomy, superior hypogastric plexus block, or ganglion impar block
 - ◊ Unilateral pain syndromes: cordotomy
 - ◊ Consider intrathecal L/S phenol block
 - ▶ Neurostimulation procedures for cancer-related symptoms (ie, peripheral neuropathy, neuralgias, complex regional pain syndrome)
 - ▶ Radiofrequency ablation for bone lesions

If interventional approaches are appropriate

- Evaluate which pain site can be relieved
- Verify that interventional technique will provide sufficient benefit
- ▶ If interventional treatment is undertaken and is successful, patient may require significant reduction in systemic opioid

If interventional approaches are not appropriate²

- Reassess therapeutic plan

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PAIN-M

Figure 2. Interventional therapies from the NCCN Guidelines for Adult Cancer Pain.

therapy are each associated with an array of chronic pain syndromes. Stem cell transplantation-mediated graft-versus-host disease can cause a variety of pain syndromes, including arthralgia, dyspareunia, dysuria, eye pain, oral pain, paresthesias, and scleroderma-like skin changes. A number of pain syndromes have also been described after surgery.

Nonpharmacologic interventions for control of chronic pain syndromes in patients with cancer include physical medicine and rehabilitation, integrative therapies (Figure 1; eg, massage, acupuncture, music), interventional therapies (Figure 2; eg, nerve blocks), psychological approaches (eg, cognitive behavioral therapy, mindfulness, guided imagery), and neurostimulatory therapies (eg, transcutaneous electrical nerve stimulation, spinal cord stimulation).

Dr. Paice also discussed the current NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines) for Adult Cancer Pain. “These include recommendations for integrative and interventional strategies. Professionals working with people with cancer-related pain should review those documents,” she told the audience.

Adverse Events Associated With Long-Term Opioid Use

Now that people are being treated with opioids for longer periods, oncologists need to be aware of persistent

adverse events associated with opioid use. These can include constipation, mental clouding, and upper gastrointestinal symptoms. Other organ systems can be affected by opioids, including the endocrine system, central nervous system, and respiratory system.

Risk assessment should include pain, function, misuse/abuse of drugs, environmental exposure, family and friends with substance abuse disorder, sexual abuse, and posttraumatic stress disorder.

“For goal-setting surrounding pain, the focus has shifted from looking for zero on a pain scale to improving patients’ function. For a thorough assessment, we need to ask patients about risk factors for misuse. Family history is a crude proxy for risk,” she explained. “Once you identify risk, you employ risk mitigation, which includes prescription drug monitoring programs, urine toxicology, and agreements and contracts. Contracts are also an educational tool. This should not be punitive,” she emphasized.

Universal precautions are very important. Clinicians must assess pain and risk of opioid misuse, decide whether to prescribe, minimize risks by using nonopioid treatments, and monitor drug-related behaviors; if aberrant behaviors occur, they must respond appropriately. “Concerning behavior should start a conversation. Discuss it with the patient and determine whether it is a one-time event, or if it signals a continuing problem,” she advised.

Weaning From Opioids

Patients should be weaned from opioids when they are no longer beneficial. Not a lot of literature exists to guide weaning, but a general rule is slow titration to 10% reduction per week or month. In addition, psychosocial and exercise support should be available.

It can be helpful to optimize nonopioids and adjuvant analgesics. Dr. Paice also suggested using antidepressants in lieu of benzodiazepines and encouraging psychiatric support if needed.

“One caveat is that as we are treating more people with nonsteroidal anti-inflammatory drugs (NSAIDs), we see more gastrointestinal bleeds. Be cautious in using NSAIDs in an aging population and in people at risk for gastrointestinal bleeds,” Dr. Paice advised. “Go exquisitely slow when weaning a patient from opioids. You may choose to plateau for special occasions, such as a child’s wedding,” she said. “Provide a clear verbal and written plan.”

“Safe storage and disposal of opioid medications are crucial. Patients should be told not to leave the medications in a place where they can be stolen or taken. This can happen when an unsuspecting patient leaves the medications in the medicine chest,” she said. Safe disposal can be accomplished by take-back programs sponsored by government agencies, pharmacies, and police departments. If these programs are not available, the leftover opioids should be mixed with wet coffee grounds or kitty litter until dissolved, and then can be disposed of in the garbage.

Disclosures: Dr. Paice has disclosed that she has no financial interests, arrangements, affiliations, or commercial interests with the manufacturers of any products discussed in this article or their competitors.

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References

1. van den Beuken-van Everdingen MH, Hochstenbach LM, Joosten EA, et al. Update on prevalence of pain in patients with cancer: systematic review and meta-analysis. *J Pain Symptom Manage* 2016;51:1070–1090.
2. Centers for Disease Control and Prevention. CDC WONDER. Current Multiple Cause of Death Data, 1999-2017. Available at: <https://wonder.cdc.gov/>. Accessed April 9, 2019.
3. May A. African-American, Hispanic deaths by fentanyl overdose rising sharply. *USA Today*. March 22, 2019. Available at: <https://www.usatoday.com/story/news/health/2019/03/22/fentanyl-drug-overdose-deaths-african-americans-hispanics/3243635002/>. Accessed March 29, 2019.
4. Centers for Disease Control and Prevention. CDC Guideline for Prescribing Opioids for Chronic Pain. Available at: <https://www.cdc.gov/drugoverdose/prescribing/guideline.html>. Accessed April 9, 2019.
5. Hojsted J, Sjogren P. Addiction to opioids in chronic pain patients: a literature review. *Eur J Pain* 2007;11:490–518.
6. Paice JA. Under pressure: the tension between access and abuse of opioids in cancer pain management. *J Oncol Pract* 2017;13:595–596.
7. Paice JA. Cancer pain management and the opioid crisis in America: how to preserve hard-earned gains in improving the quality of cancer pain management. *Cancer* 2018;124:2491–2497.
8. Paice JA, Portenoy R, Lacchetti C, et al. Management of chronic pain in survivors of adult cancers: American Society of Clinical Oncology practice guideline. *J Clin Oncol* 2016;34:3325–3345.