Management of Chronic Pain in Survivors of Adult Cancers: American Society of Clinical Oncology Clinical Practice Guideline
Introduction

• Chronic pain can be a serious, negative consequence of surviving cancer.

• Few evidence-based cancer pain guidelines address the more nuanced care required when pain persists for months or years. This situation is in part due to the relative absence of studies exploring the experiences of chronic pain in cancer survivors, or the long-term safety and effectiveness of analgesic interventions.

• As the population of cancer survivors expands, all clinicians who interact with these individuals, including oncologists, advanced practice providers, and primary care physicians, will require the knowledge and skills to implement best practices in the management of chronic pain.

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ASCO Guideline Development Methodology

The ASCO Clinical Practice Guidelines Committee guideline process includes:

• a systematic literature review by ASCO guidelines staff
• an expert panel provides critical review and evidence interpretation to inform guideline recommendations
• final guideline approval by ASCO CPGC

The full ASCO Guideline methodology supplement can be found at:

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Clinical Question

How should chronic pain be managed in the adult cancer survivor?

• Clinical Domains
  – Screening and Comprehensive Assessment
  – Treatment and Care Options
  – Risk Assessment, Mitigation and Universal Precautions with Opioid Use

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Target Population and Audience

Target Population
Any adult who has been diagnosed with cancer and is experiencing pain that lasts ≥3 months, irrespective of etiology.

Target Audience
Health care practitioners who provide care to cancer survivors.
Summary of Recommendations

Screening and Comprehensive Assessment

**Recommendation 1.1**
Clinicians should screen for pain at each encounter. Screening should be performed and documented using a quantitative or semi-quantitative tool. (*Type: Informal consensus; benefits outweigh harms; Evidence quality: Insufficient; Strength of Recommendation: Strong*)

**Recommendation 1.2**
Clinicians should conduct an initial comprehensive pain assessment. This assessment should include an in-depth interview, which explores the multidimensional nature of pain (pain descriptors, associated distress, functional impact and related physical, psychological, social and spiritual factors) and captures information about cancer treatment history and co-morbid conditions, psychosocial and psychiatric history (including substance use), and prior treatments for the pain. The assessment should characterize the pain, clarify its etiology and make inferences about pathophysiology. A physical examination should accompany the history and diagnostic testing should be done when warranted. (*Type: Informal consensus; benefits outweigh harms; Evidence quality: Insufficient Strength of Recommendation: Moderate*)
Recommendation 1.3
Clinicians should be aware of chronic pain syndromes resulting from cancer treatments, their prevalence, risk factors for individual patients, and appropriate treatment options. *(Type: Informal consensus; benefits outweigh harms; Evidence quality: Insufficient; Strength of Recommendation: Moderate)*

Recommendation 1.4
Clinicians should evaluate and monitor for recurrent disease, second malignancy or late onset treatment effects in any patient who reports new onset pain. *(Type: Informal consensus; benefits outweigh harms; Evidence quality: Insufficient; Strength of Recommendation: Moderate)*
Treatment and Care Options

**Recommendation 2.1**  
Clinicians should aim to enhance comfort, improve function, limit adverse events and ensure safety in the management of pain in cancer survivors.  
(Type: Informal consensus; benefits outweigh harms; Evidence quality: Insufficient; Strength of Recommendation: Moderate)

**Recommendation 2.2**  
Clinicians should engage patient and family/caregivers in all aspects of pain assessment and management.  
(Type: Informal consensus; benefits outweigh harms; Evidence quality: Insufficient; Strength of Recommendation: Moderate)

**Recommendation 2.3**  
Clinicians should determine the need for other health professionals to provide comprehensive pain management care in patients with complex needs. If deemed necessary, the clinician should define who is responsible for each aspect of care and refer patients accordingly.  
(Type: Informal consensus; benefits outweigh harms; Evidence quality: Insufficient; Strength of Recommendation: Moderate)
Summary of Recommendations

Non-Pharmacologic Interventions

Recommendation 2.4
Clinicians may prescribe directly or refer to other professionals to provide other interventions to mitigate chronic pain or improve pain-related outcomes in cancer survivors. The use of these interventions must consider pre-existing diagnoses and comorbidities and should include an assessment for adverse events. (Type: Evidence-based; benefits outweigh harms; Evidence quality: Intermediate; Strength of Recommendation: Moderate)
Summary of Recommendations

Pharmacologic Interventions
Miscellaneous Analgesics

Recommendation 2.5
Clinicians may prescribe the following systemic non-opioid analgesics, and adjuvant analgesics to relieve chronic pain and/or improve function in cancer survivors where no contraindications exist including serious drug-drug interactions:

• NSAIDS
• Acetaminophen (Paracetamol)
• Adjuvant analgesics, including selected antidepressants and selected anticonvulsants with evidence of analgesic efficacy (such as the antidepressant duloxetine and the anticonvulsants gabapentin and pregabalin) for neuropathic pain conditions or chronic widespread pain

(Type: Evidence-based; benefits outweigh harms; Evidence quality: Intermediate; Strength of Recommendation: Moderate)

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Summary of Recommendations

**Recommendation 2.6**
Clinicians may prescribe topical analgesics (such as commercially available NSAIDS, local anesthetics, or compounded creams/gels containing baclofen, amitriptyline and ketamine), for the management of chronic pain. *(Type: Evidence-based; benefits outweigh harms; Evidence quality: Intermediate; Strength of Recommendation: Moderate)*

**Recommendation 2.7**
Corticosteroids are not recommended for long term use in cancer survivors solely to relieve chronic pain. *(Type: Evidence-based; harms outweigh benefits; Evidence quality: Intermediate; Strength of Recommendation: Moderate)*

**Recommendation 2.8**
Clinicians should assess risks for adverse effects of pharmacologic therapies used for pain management, including non-opioids, adjuvant analgesics and other agents. *(Type: Evidence-based and Informal consensus; benefits outweigh harms; Evidence quality: Intermediate; Strength of Recommendation: Moderate)*

**Recommendation 2.9**
Clinicians may follow specific State regulations that allow access to medical cannabis or cannabinoids for patients with chronic pain after a consideration of the potential benefits and risks of the available formulations. *(Type: Evidence-based; benefits outweigh harms; Evidence quality: Intermediate; Strength of Recommendation: Moderate)*

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Summary of Recommendations

Opioids

Recommendation 2.10
Clinicians may prescribe a trial of opioids in carefully selected cancer survivors with chronic pain who do not respond to more conservative management and who continue to experience pain-related distress or functional impairment. Non-opioid analgesics and/or adjuvants can be added as clinically necessary. (Type: Evidence-based; benefits outweigh harms; Evidence quality: Intermediate; Strength of Recommendation: Moderate)

Recommendation 2.11
Clinicians should assess risks for adverse effects of opioids used for pain management. (Type: Evidence-based and Informal consensus; benefits outweigh harms; Evidence quality: Intermediate Strength of Recommendation: Moderate)
Summary of Recommendations

Risk Assessment, Mitigation and Universal Precautions with Opioid Use

**Recommendation 3.0**
Clinicians should assess the potential risks and benefits when initiating treatment that will incorporate long term use of opioids. *(Type: Informal consensus; benefits outweigh harms; Evidence quality: Insufficient; Strength of Recommendation: Moderate)*

**Recommendation 3.1**
Clinicians should clearly understand terminology such as tolerance, dependence, abuse and addiction as it relates to the use of opioids for pain control. *(Type: Informal consensus; benefits outweigh harms; Evidence quality: Insufficient; Strength of Recommendation: Moderate)*

**Recommendation 3.2**
Clinicians should incorporate a “universal precautions” approach to minimize abuse, addiction and adverse consequences of opioid use such as opioid-related deaths. Clinicians should be cautious in co-prescribing other centrally-acting drugs, particularly benzodiazepines. *(Type: Evidence-based and Informal consensus; benefits outweigh harms; Evidence quality: Intermediate; Strength of Recommendation: Moderate)*
Summary of Recommendations

**Recommendation 3.3**
Clinicians should understand pertinent laws and regulations regarding prescribing controlled substances. *(Type: Informal consensus; benefits outweigh harms; Evidence quality: Insufficient; Strength of Recommendation: Moderate)*

**Recommendation 3.4**
Clinicians should educate patients and family members regarding the risks and benefits of long-term opioid therapy, safe storage, use and disposal of controlled substances. Clinicians are encouraged to address possible myths and misconceptions about medication use and should educate patients about the need to be cautious when using alcohol or sedating over-the-counter medications, or in taking centrally-acting medications from other physicians. *(Type: Informal consensus; benefits outweigh harms; Evidence quality: Insufficient; Strength of Recommendation: Moderate)*

**Recommendation 3.5**
If opioids are no longer warranted, clinicians should taper the dose to avoid abstinence syndrome. The rate of tapering and use of co-therapies to reduce adverse effects should be individualized for each patient. *(Type: Evidence-based and Informal consensus; benefits outweigh harms; Evidence quality: Intermediate; Strength of Recommendation: Moderate)*

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Chronic Pain Syndromes Associated with Cancer Treatment

**Chemotherapy-Related Pain Syndromes**
- Bony complications of long-term corticosteroids
  - Avascular necrosis
  - Vertebral compression fractures
- Carpal tunnel syndrome
- Chemotherapy-induced peripheral neuropathy
- Raynaud’s syndrome

**Hormonal Therapy-Related Pain Syndromes**
- Arthralgias
- Dyspareunia
- Gynecomastia
- Myalgias
- Osteoporotic compression fractures

**Radiation-Related Pain Syndromes**
- Chest wall syndrome
- Cystitis
- Enteritis and proctitis
- Fistula formation
- Lymphedema
- Myelopathy
- Osteoporosis

**Stem Cell Transplant Mediated Graft Versus Host Disease**
- Arthralgias/myalgias
- Dyspareunia, vaginal pain
- Dysuria
- Eye pain
- Oral pain and reduced jaw motion
- Paresthesias
- Scleroderma-like skin changes

**Surgical Pain Syndromes**
- Lymphedema
- Post-amputation phantom pain
- Post-mastectomy pain
- Post-radical neck dissection pain
- Postsurgery pelvic floor pain
- Post-thoractomy pain/frozen shoulder
- Post-surgery extremity pain (e.g. sarcoma)
### Disciplines and Interventions for Chronic Pain

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<tr>
<th>Disciplines</th>
<th>Examples of Possible Interventions</th>
<th>Strength of Evidence and Recommendation</th>
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| Physical medicine and rehabilitation    | Physical therapy, occupational therapy, recreational therapy, individualized exercise program, orthotics, ultrasound, heat/cold | Type: Evidence-based; benefits outweigh harms  
Evidence quality: Intermediate  
Strength of Recommendation: Moderate |
| Integrative Therapies                   | Massage, acupuncture, music                                                                         | Type: Evidence-based; benefits outweigh harms  
Evidence quality: Low  
Strength of Recommendation: Weak |
| Interventional Therapies                | Nerve blocks, neuraxial infusion (epidural/intrathecal), vertebroplasty/kyphoplasty                  | Type: Evidence-based; benefits outweigh harms  
Evidence quality: Intermediate  
Strength of Recommendation: Moderate |
| Psychological Approaches                | Cognitive behavioral therapy, distraction, mindfulness, relaxation, guided imagery                    | Type: Evidence-based; benefits outweigh harms  
Evidence quality: Intermediate  
Strength of Recommendation: Moderate |
| Neurostimulatory                        | TENS, spinal cord stimulation, peripheral nerve stimulation, transcranial stimulation                 | Type: Evidence-based; benefits outweigh harms  
Evidence quality: Low  
Strength of Recommendation: Weak |
Adverse Effects Associated with Long-term Opioid Use

Persistent Common Adverse Effects

• Constipation
• Mental clouding
• Upper gastrointestinal symptoms (pyrosis, nausea, bloating)

Endocrinopathy (Hypogonadism/hyperprolactinemia)

• Fatigue
• Infertility
• Osteoporosis/osteopenia
• Reduced libido
• Reduced frequency/duration or absence of menses

Neurotoxicity

• Myoclonus
• Other changes in mental status (including mood effects, memory problems, increased risk of falls in the elderly)
• Risk of opioid induced hyperalgesia (incidence and phenomenology uncertain but escalating pain in tandem with dose escalation raises concern)

Sleep Disordered Breathing

• Increased risk of concurrent benzodiazepine in patients predisposed to sleep apnea
• New onset sleep apnea
• Worsening of sleep apnea syndromes
Patient and Clinician Communication

• Because post-treatment pain is so complicated, good communication between patients and their medical providers is essential.

• Cancer survivors are more than their cancer history or their pain; they are individuals with unique needs.

• Just as no two cancers are alike, patients experience pain differently. Some patients may even be reluctant to discuss their pain, seeing it as a sign of weakness, fear of recurrence, or an expected and untreatable complication of their cancer treatment.

• A pain assessment is recommended at every visit. In teasing out how they are coping, clinicians need to ask patients how chronic pain is impacting them, and suggest how they can work together to better manage their symptoms and improve their quality of life.
Health Disparities

- Although ASCO clinical practice guidelines represent expert recommendations on the best practices in disease management to provide the highest level of cancer care, it is important to note that many patients have limited access to health care.

- Lack of access because of geographic location and distance from appropriate treatment facilities is an ongoing concern for many patients.

- A systematic review on pain management confirmed that racial/ethnic minorities consistently receive less adequate treatment for acute and chronic pain than non-Hispanic whites, even after controlling for age, gender, and pain intensity.*

- Individuals of minority groups also appear to underreport pain intensity, contributing in part to pain management disparities. Physicians’ own cultural beliefs and stereotypes regarding pain, minority individuals, and use of narcotic analgesics also plays a role.*

- Awareness of these disparities in access to care should be considered in the context of this clinical practice guideline, and health care providers should strive to deliver the highest level of cancer care to these vulnerable populations.

Multiple Chronic Conditions

• Creating evidence-based recommendations to inform treatment of patients with additional chronic conditions, a situation in which the patient may have two or more such conditions—referred to as multiple chronic conditions (MCC)—is challenging.

• Patients with MCC are a complex and heterogeneous population and are frequently excluded from clinical trials, making it difficult to account for all of the possible permutations to develop specific recommendations for care.

• Insomnia and psychologic distress are common conditions in patients with chronic pain, present in 17% and 90% of adult sufferers, respectively.* The most common psychiatric disorders comorbid with chronic pain include depression, anxiety, personality disorders and post-traumatic stress disorder.*†

• The optimal approach to incorporating comorbidity information in chronic pain management continues to be explored, but screening and diagnosis are key.

†Howe CQ, Sullivan MD: The missing 'P' in pain management: how the current opioid epidemic highlights the need for psychiatric services in chronic pain care. Gen Hosp Psychiatry 36:99-104, 2014

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Additional Resources

More information, including a Data Supplement, a Methodology Supplement, slide sets, and clinical tools and resources, is available at

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Patient information is available at www.cancer.net
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