



# Management of Cancer Pain in Primary Care

**Sachin Kale, MD, MBOE**

*Medical Director for Ambulatory Palliative Care  
Associate Professor, Division of Palliative Medicine  
The Ohio State University Wexner Medical Center*

**MedNet21**  
Center for Continuing Medical Education

 **THE OHIO STATE UNIVERSITY**  
WEXNER MEDICAL CENTER

## Disclosures

- No financial relationships to disclose
- Off-label use of medication will be discussed in this presentation

## Learning Objectives

- Describe a comprehensive approach to assessing and managing pain in cancer survivors
- Discuss Universal Precautions for opioid prescribing

## Case 1- Intersection of Cancer-Related Pain and Chronic Pain

- 68 yo female with Stage II breast cancer s/p bilateral mastectomy, chemotherapy, now on surveillance but with ongoing pain from surgery and lymphedema
- Hx low back pain from DDD; celecoxib and pregabalin doses maximized
- Recently told by Oncology office that they will no longer prescribe opioids
- Intolerance to other non-opioid adjuvants (duloxetine, desipramine)
- Notes all pain has been well controlled on Buprenorphine transdermal patch, and was unable to do PT/OT prior to recent titration
- You are able to confirm her cancer history and appropriate opioid use with her Oncologist

## Case 2- Cancer-Related Pain in a Long-term Cancer Survivor

- 45 yo man with hx of Stage IV head & neck cancer
- Received surgery followed by chemoradiation
- No evidence of recurrence for 14 months
- Persistent pain in neck and throat following cancer treatment which has improved somewhat over time
- Currently moved to your area. Receiving 15mg oxycodone 3 tabs per day and Morphine-ER 15mg every 12 hours. Pain is well controlled.
- You are able to confirm his cancer history, appropriate opioid use with his Oncologist, and that his opioid dose has not been reduced in over a year.

## Chronic Pain in Long Term Cancer Survivors

- This is a situation that blurs the distinction between “cancer pain” and “chronic pain”
- Pain is now chronic, but may have generated from:
  - Direct tumor involvement of bone, nerves, viscera or soft tissue
  - Tissue damage from cancer treatment (e.g. surgery or radiation)
  - Long lasting side effects from cancer treatment (e.g. peripheral neuropathy)

## Prevalence of Pain in Long Term Cancer Survivors

2016-2017 National Health Survey of adult cancer survivors

- 16.1% had HICP
  - High impact chronic pain + major activity restriction
- 34.6% had chronic pain
- Higher prevalence of pain reported in cancer survivors with
  - Less than a high school education
  - Low household income
  - Public insurance
- Survivors of bone, kidney, and throat-pharynx cancers had highest prevalence of pain

Jiang C, et al. JAMA Oncol 2019

## Cancer Survivor Experiences with Chronic Pain

- Themes from a qualitative study
  - Invisible suffering at the cost of survival
    - Gratitude for being alive, but struggling with limitations and symptoms post cancer treatment
  - An opioid paradox
    - Perceived urgency by clinician to stop opioids once treatment finished, despite continued pain
    - Remaining on opioids triggers stigma
  - Lack of answers on what to expect in survivorship and what might reduce pain
    - Unclear who is to help manage long lasting pain

Jones KF, et al. Journal of Palliative Medicine 2023.

## **Clinician Perspectives on Managing Chronic Pain after Cancer Treatment**

- Challenges:
  - Uncertainty about who is best positioned to manage chronic pain in this population
  - Complexities with long term opioid management
  - Management of psychosocial stressors
    - Including difficulty accessing mental or behavioral health services for cancer survivors

Check, DK, et al. JCO Oncology Practice 2023.

## **Pain Management in Long Term Survivors**

## **Key Aspects of Pain Management**

- Transition to long term survivorship affects several aspects of pain management:
  - Goals of therapy
  - Assessment
  - Therapeutic/treatment options

## **Goals of Therapy**

- In addition to pain relief, there is added emphasis on:
  - Improved functionality
  - Wellness
  - Limiting long term adverse events/side effects of medications

## **Pain Assessment in Cancer Survivorship**

- New or acute pain
  - Differential diagnosis should include disease recurrence, secondary malignancy, and late onset treatment effects
- Chronic pain
  - Specific cancer pain syndrome should be identified if possible
  - Emphasis on non-opioid and non-pharmacologic options
  - Decision about management of ongoing opioid therapy

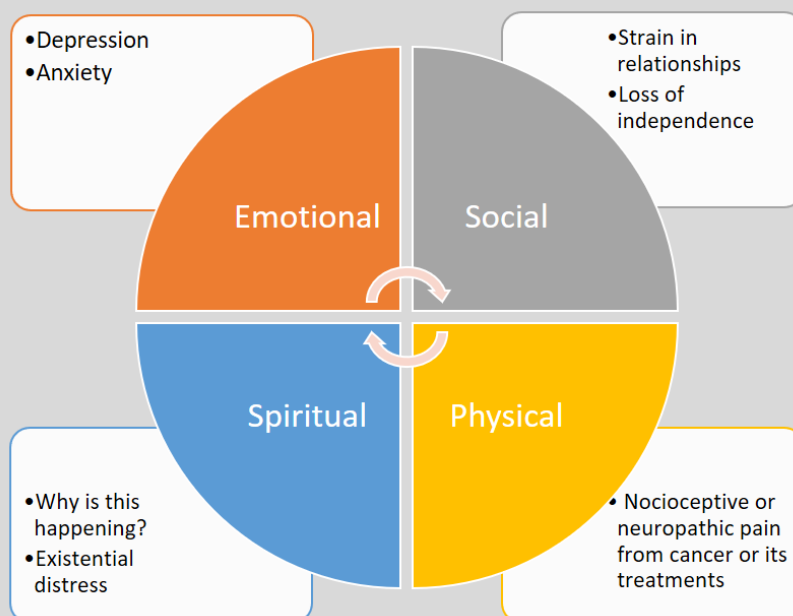
## **Pain Assessment in Cancer Survivorship**

- Recognize red flags
  - Neurologic deficits
  - Rapidly increasing pain
  - Pain without a clear etiology
  - Signs of cancer recurrence

## Determining “Severity” of Pain

- Pain is a subjective experience
- Numeric scores are helpful in tracking a patient’s experience, but should not be used solely
- Functional status is equally important
  - Has pain interfered with activities of daily living?
  - PEG- Pain, Enjoyment of life, General activity Scale
    - Numeric pain score
    - How pain has interfered with enjoyment of life
    - How pain has interfered with general activity

## Concept of Total Pain



Emily Jane Harrop et al. Arch Dis Child Educ Pract Ed 2017;102:239-243



## Pain Treatment Options

- Non-pharmacologic
  - Behavioral (CBT, etc)
  - Interventional (Epidural steroid injections, neuromodulation techniques, et)
  - Integrative (acupuncture, therapeutic massage, etc)
- Pharmacologic
  - Non-opioid medications
  - Opioids

*Very important, especially in long-term cancer survivors. May not be practical for some during cancer treatment*

## Syndrome Based Treatment Approach

Syndrome	Example treatments
Post-radical neck dissection syndrome	Mirror therapy, cognitive therapy, neuropathic adjuvants
Post mastectomy Post thoracotomy	Intercostal nerve block, TENS unit, neuropathic adjuvants
Lymphedema	Manual lymphatic drainage, compression garments
Myofascial pain	Trigger point injections, acupuncture, NSAIDS
Vertebral compression	Vertebroplasty, weight bearing therapy, muscle relaxants, bisphosphonates, NSAIDS
Neuropathic pain	Pharmacologic non opioid treatments to address neuropathy, physical therapy

2019 NCCN Practice Guidelines: Survivorship

## Interdisciplinary Approach

Specialty	Example Interventions
PM&R	PT/OT, ultrasound, exercise program
Psychological	Cognitive behavioral therapy, guided imagery
Interventional	Nerve blocks, vertebroplasty
Integrative	Massage, acupuncture
Neurostimulatory	TENS, spinal cord stimulation

Paice, J.A. Management of Chronic Pain in Survivors of Adult Cancers:  
ASCO Clinical Practice Guideline. Jour Clin Onc, 2016



## Management of Cancer Pain in Primary Care

**Maureen Saphire, PharmD, BCGP**  
*Opioid Stewardship and Palliative Medicine Pharmacist,  
 James Cancer Hospital  
 The Ohio State University Wexner Medical Center*

## Non-Opioid Analgesics

Medication	Indication	Clinical Tips
Topicals	Localized pain	<ul style="list-style-type: none"> <li>Lidocaine patch or cream for neuropathic pain</li> <li>Diclofenac gel for musculoskeletal pain</li> </ul>
Skeletal muscle relaxants	Short-term use (2-4 weeks) for musculoskeletal pain	<ul style="list-style-type: none"> <li>Use less sedating agents at lowest effective doses (i.e., methocarbamol, metaxolone)</li> <li>Caution serotonin syndrome risk (cyclobenzaprine)</li> <li>Antispasticity agents (i.e., baclofen, tizanidine) may be helpful for spasticity from CNS lesions</li> </ul>

Witenko C, et al. P T 2014; 39(6): 427-435.

## Non-Opioid Analgesics

Medication	Indication	Clinical Tips
NSAIDs	Bone mets, soft tissue infiltration, inflammation	<ul style="list-style-type: none"> <li>Monitor for bleeding, renal dysfunction</li> <li>COX-2 selective preferred for chronic use to limit GI injury risk</li> </ul>
Acetaminophen	Myalgias, arthralgias	<ul style="list-style-type: none"> <li>Limit to 3g per day in elderly, 2g per day in liver injury</li> </ul>
Corticosteroids	Acute pain flares related to inflammation	<ul style="list-style-type: none"> <li>Short-term use/burst therapy limits adverse effects</li> </ul>

Use of these agents may be contraindicated in patients undergoing certain cancer treatments

## Adjuvants for Neuropathic Pain

Medication	NNT	Clinical Tips
Tricyclic antidepressants (TCA)	3 – 4	<ul style="list-style-type: none"> <li>• Secondary amines (desipramine, nortriptyline) cause less adverse effects</li> <li>• Target dose for pain: 25 – 150mg daily (HS or divided doses)</li> </ul>
Selective serotonin-norepinephrine reuptake inhibitors (SNRI)	6 – 7	<ul style="list-style-type: none"> <li>• Duloxetine drug of choice for chemo-induced peripheral neuropathy</li> <li>• Target doses for pain:               <ul style="list-style-type: none"> <li>○ duloxetine 60-120mg/day</li> <li>○ venlafaxine &gt;200mg/day</li> </ul> </li> <li>• Watch drug-drug interactions, organ dysfunction</li> </ul>

Finnerup NB, et al. Lancet Neurol 2015; 162-173.  
Pharmacotherapy of Neuropathic Pain. PharmLetter, 2017.

## Adjuvants for Neuropathic Pain

Medication	NNT	Clinical Tips
Gabapentin, pregabalin	7 – 8	<ul style="list-style-type: none"> <li>• Requires titration to minimum effective dose:               <ul style="list-style-type: none"> <li>○ gabapentin <math>\geq 1200</math>mg/day</li> <li>○ pregabalin <math>\geq 300</math>mg/day</li> </ul> </li> <li>• Requires dose adjustment for renal dysfunction</li> </ul>
Carbamazepine, oxcarbazepine	n/a	<ul style="list-style-type: none"> <li>• Most beneficial for trigeminal neuralgia</li> <li>• Watch drug-drug interactions</li> <li>• Monitor CBC, CMP, thyroid function</li> </ul>

Resource: OSUWMC Clinical Practice Guideline: Outpatient Non Opioid Management of Chronic Pain  
<https://techlicenseexpress.com/>

Finnerup NB, et al. Lancet Neurol 2015; 162-173.  
Pharmacotherapy of Neuropathic Pain. PharmLetter, 2017.

## Opioid Use in Cancer Pain

Opioids are often required to treat cancer-related pain

- Provides rapid analgesia for severe pain
- Use of non-opioid alternatives might be limited by treatment
- Impaired ability to participate in non-pharmaceutical modalities

*But what about opioid use beyond cancer treatment in people with stable/no active disease?*

## Opioid Use in Survivorship

### ASCO 2016: Chronic Pain in Survivors

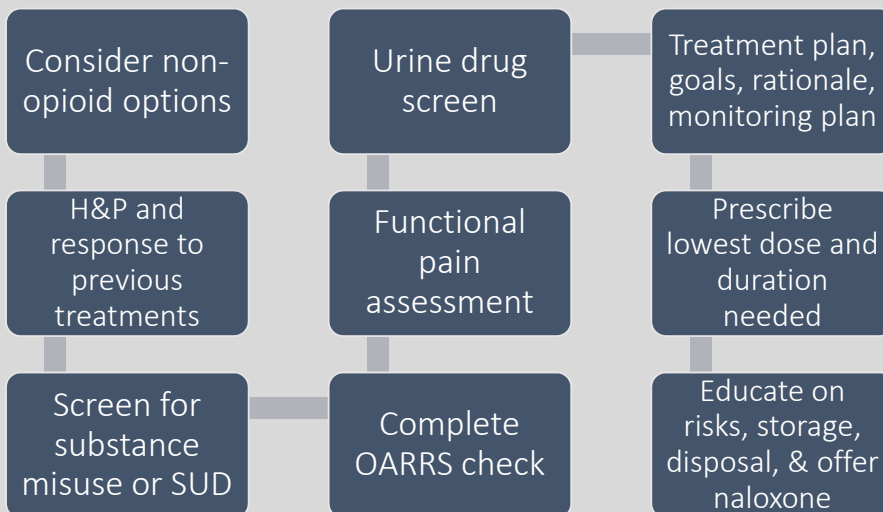
- May prescribe a **trial of opioids**
  - Carefully-selected cancer survivors with chronic pain and distress or functional impairment
- Incorporate a **universal precautions** approach
  - Minimize abuse, addiction, and adverse consequences

### NCCN 2023: Survivorship- Pain

- Use **lowest effective dose** for **shortest period of time** when opioids are appropriate and necessary
- Precautions:
  - Educate on risks of opioid use
  - Prescribe naloxone
  - Monitor for substance use disorder

## Opioid Prescribing for Subacute & Chronic Pain

OAC Rule 4731-11-14



## Opioid Prescribing for Subacute & Chronic Pain

OAC Rule 4731-11-14: MED Checkpoints



MED conversion tables available at [www.ohiopmp.gov](http://www.ohiopmp.gov)

## Universal Precautions for All Patients

### Screen

- Stratify risk of opioid misuse and abuse
- Check PDMP (OARRS)
- Urine drug screen

### Minimize Risk

- Med use agreement
- Naloxone Rx
- Educate on proper use, storage & disposal

### Monitor & Respond

- Set realistic goals
- Monitor compliance, adverse effects
- Refer to specialists as necessary

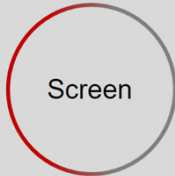
## Risk Assessment

Screen

- Minimum:
  - Assess for active substance abuse
    - CAGE-AID questionnaire (cut down, annoyed, guilty, eyeopener for drinking & drugs)
    - 4 C's (impaired control, compulsive use, continued use despite consequences, craving)
  - Assess personal and family history of substance abuse and current living situation
  - Assess for concurrent psychiatric conditions
  - Document in your note

## Risk Assessment

*No tool has been validated in a cancer population to predict future opioid misuse*

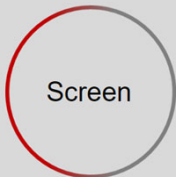


Screen

<b>Opioid Risk Tool (ORT)</b>	<b>5 item questionnaire. Can be completed by patients. Asks about family history</b>
Screeners and Opioid Assessment for Patients with Pain (SOAPP)	5, 14, or 24 item questionnaire. Complete by patients.
Pain Assessment and Documentation Tool (PADT)	Assesses 4 domains. Completed by physicians
Scoring system to predict outcome (DIRE)	Assesses 4 domains (diagnosis, intractability, risk, efficacy). Complete by physicians
Current Opioid Misuse Measure (COMM)	17-item questionnaire. Completed by patients.

Ballantyne JC. BMJ 2013

## Prescription Drug Monitoring Program (PDMP)



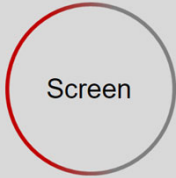
Screen

- Ohio Automated Rx Reporting System (OARRS)
- Verify last fill dates of schedule II-V and gabapentin
  - Residential facilities and OUD treatment programs are not required to report
- Required to check at least previous 12 months prior to initial opioid or benzo Rx and every 90 days for ongoing Rx

[www.ohiopmp.gov](http://www.ohiopmp.gov)



## Urine Drug Screening



Screen

- Obtain if evidence of substance misuse or SUD
- Tool for baseline screening and ongoing compliance monitoring
- Two testing types:
  - Immunoassay
  - Confirmation (liquid or gas chromatography)
- Do not make major medical decisions based only on immunoassay results

Moeller KE, et al. Mayo Clin Proc 2017; 92(5): 774-796.

## Opioid Treatment Agreement



Minimize Risk

### Benefits

- Opportunity for patient education and informed consent
- Outlines physician/provider responsibilities
- Sets expectations about appropriate use of opioids

### Potential Drawbacks

- Need for effective analgesia adds element of coercion
- Violations of opioid contracts may occur for reasons other than misuse/diversion
- Only weak evidence of reduction of misuse

*Pain agreement template available on State Medical Board of Ohio website*

Starrels JL, et al. Annals of Int Med 2010

## Opioid Prescribing Tips

Minimize  
Risk

### Short-acting opioids

- Morphine, oxycodone, hydromorphone, hydrocodone (with APAP)

Onset 30-60 mins

Peak 1-2 hours

Duration ~4 hours

Include daily dose limits in the directions, not the frequency

Hydromorphone 2mg tablet  
Take 1 tablet by mouth every 8  
hours as needed for pain



Hydromorphone 2mg tablet  
Take 1 tablet by mouth every  
4 hours as needed for pain,  
max 3 tablets per day



## Opioid Prescribing Tips Cont.

Minimize  
Risk

### Long-acting opioids

- Only for severe, persistent pain in opioid-tolerant patients
- Opioid tolerance = taking at least 60 MED daily x7 days or longer
- Use extra caution in patients at risk for adverse events (resp issues, SUD)

Dosage Form	Onset	Peak	Duration
12-hr LA/ER oral pill (i.e., morphine, oxycodone)	~1-2 hrs	~4 hrs	~12 hrs
24-hr LA/ER oral pill (i.e., hydrocodone, hydromorphone)	~6 hrs	~9 – 12 hrs	24+ hrs
Fentanyl TD patch	6 – 12 hrs	Steady state: 72 – 144 hrs	72 hrs
Buprenorphine TD patch	~17 hrs	Steady state: 72 hrs	7 days

## Opioid Prescribing Tips Cont.

Minimize  
Risk

### Best for renal insufficiency\*

- Oxycodone, hydromorphone, buprenorphine, methadone, fentanyl

### Best for liver insufficiency\*

- Morphine, hydromorphone, buprenorphine, methadone, oxymorphone

### Avoid (poor efficacy, safety, or potential interactions)

- Tramadol, codeine, meperidine
- APAP combo products, unless carefully monitored for daily APAP limits

\*Still use cautiously, start low and go slow with dosing

## Treatment Goals & Monitoring

Monitor &  
Respond

### Set objective goals for opioid use & reassess

- Focus on function, not numerical pain score
- Educate on dependence, tolerance, and risks/limitations of opioids

### Monitor adverse effects

- Prescribe proper laxatives (not docusate alone)
- Potential long-term effects:
  - Central sleep apnea, hypogonadism, substance use disorder
  - Consider opioid tapering, refer to specialists as necessary

Bradley A, et al. Curr Treat Options Oncol 2023; 24(7): 867-879.

## Return to case 1

- Patient was experiencing functional impairment related to both cancer pain and chronic pain
- Other therapies have been maximized
- Buprenorphine transdermal patches provide low-dose opioid pain treatment with low risk of harm
- Although not required, you may consider:
  - Providing a treatment agreement
  - Asking about history of substance use disorder
    - A point of care urine test shows no illicit substances
  - Checking OARRS

## Buprenorphine for Pain

- Partial mu opioid agonist, kappa receptor antagonist
- Low risk of respiratory depression
- Better tolerability as compared to full agonists
  - Less sedation, euphoria, GI, endocrine effects
  - Safe in renal insufficiency and mild-moderate liver disease
- Transdermal patches may be initiated in opioid-naïve patients:
  - Buprenorphine 5 mcg/hr transdermal patch every 7 days

Case AA, et al. Curr Treat Options in Oncol 2021;22:116.

## Case 1 continued

- Buprenorphine 10 mcg/hr transdermal patch every 7 days is continued (approximately 24 MED) with f/u in 2 months
- Functional measure of success as agreed upon with patient: participating in PT/OT sessions twice a week
- Senna 17.2mg at night is prescribed, with instructions to increase to twice per day if needed
- Education about opioid use, safe storage and disposal is provided



## Management of Cancer Pain in Primary Care

**Sachin Kale, MD, MBOE**

*Medical Director for Ambulatory Palliative Care,  
James Cancer Hospital*

*Associate Professor, Division of Palliative Medicine  
The Ohio State University Wexner Medical Center*

## Case 2

- Patient with persistent pain related to cancer and cancer treatment on chronic opioid therapy
- Opioid dose unchanged for over a year
- Will you continue opioid treatment?

## Chronic Pain and Opioids

### *CDC Recommendations*

- **If not currently on opioids**
  - Consider avoiding opioid therapy
- **If currently receiving opioid therapy**
  - Develop individualized treatment plan
  - Do not abruptly taper or discontinue current opioid treatment
  - Consider suboxone (buprenorphine/naloxone) if evidence of opioid use disorder

Wood, et al. JAMA 2019

## **CDC Guidance for Continuing Opioid Therapy**CDC 2022

- If benefits outweigh the risks, optimize nonopioid therapies while continuing opioid therapy
- Collaborate with patients who agree to taper their dose
- If tapering, taper slowly enough to minimize withdrawal symptoms
- Individualize the pace of tapering
- Unless signs of life threatening side effects (e.g. confusion, sedation, slurred speech), opioid therapy should not be discontinued abruptly or rapidly

## **Tapering Guidelines**

- Reevaluate necessity of opioid regularly.
- Consider 10-20% reduction at a time to avoid opioid withdrawal
- For patients with no signs of inappropriate opioid use, a slow taper (months to years) may be most appropriate
- Consider specialist referral to help patient get down to lowest tolerated opioid dose

Goodlev, E., et al. J of Pall Med, 2019

## Return to Case 2

- Universal precautions approach taken
- Discussion about opioid use
- An initial first taper may be reduction in oxycodone to 10mg max 3 tabs per day, and continuation of long acting Morphine

## Take Home Points

- The approach to treating cancer related pain depends on the patient's cancer trajectory
- Use a Universal Precautions Approach to opioid prescribing
- Opioid tapering in long term cancer survivors involves a multimodal approach and is individualized