Comprehensive Assessment of Pain
- History
  - Pain assessment location: intensity, description, duration, alleviating and aggravating factors
  - Medication use: past and current, include OTC and herbal products
  - Functional assessment: effect of pain on ADLs and QOL
  - Risk assessment for Substance Use Disorder (SUD)
    - Past, present use of tobacco, alcohol, cannabis, illicit agents and prescription drugs
    - Family history of SUD
    - History of abuse (physical, emotional, sexual), PTSD
- Physical Assessment
- Imaging, Labs – if contribute to the treatment plan

Assessment Guides Pharmacologic Therapy

<table>
<thead>
<tr>
<th>Type of Pain</th>
<th>Pharmacologic Interventions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Somatic (nociceptive)</td>
<td>Non opioids</td>
</tr>
<tr>
<td>&quot;Aching&quot;, &quot;throbbing&quot;</td>
<td>NSAIDs</td>
</tr>
<tr>
<td>Bone metastases, arthritis</td>
<td>Opioids</td>
</tr>
<tr>
<td>Neuropathic</td>
<td>Opioids (may require higher doses)</td>
</tr>
<tr>
<td>&quot;Tingling&quot;, &quot;burning&quot;, &quot;electrical&quot;</td>
<td>Adjuvant analgesics</td>
</tr>
<tr>
<td>Chemotherapy-induced peripheral neuropathy, post herpetic neuropathy, nerve root compression by tumor</td>
<td>Corticosteroids</td>
</tr>
<tr>
<td>Visceral</td>
<td>Opioids Corticosteroids</td>
</tr>
<tr>
<td>&quot;Squeezing&quot;, &quot;cramping&quot; – diffuse, may be referred</td>
<td>Adjuvant analgesics</td>
</tr>
<tr>
<td>RUQ pain due to liver metastases with pain in upper right shoulder</td>
<td>Local anesthetics</td>
</tr>
</tbody>
</table>

Pharmacologic Management: Non Opioids
- Acetaminophen
  - Antipyretic and analgesics but not anti-inflammatory
  - Hepatic toxicity at doses ≥ 2000-3000 mg per day
  - Educate regarding acetaminophen content in many OTC medications, e.g., sleep, cough, allergy, others.
- NSAIDs
  - NSAIDs are antipyretic, analgesic, and anti-inflammatory
  - Toxicities include GI bleed, acute kidney injury and stroke/MI, particularly in those with risk factors

Pharmacologic Management: Adjuvant Agents
- Gabapentinoids - toxicity reported with chronic kidney disease or worsening acute renal failure
  - Renal dosing: If patient already on gabapentin or pregabalin for existing pain, dose reduce if CrCl < 60
  - Hepatic dosing: No adjustments warranted
- Duloxetine
  - Renal dosing: If patient already on duloxetine, decrease dose if CrCl < 90, avoid use or stop if ≤ 30
  - Hepatic dosing: Avoid if pt with liver disease (Child-Pugh Class A, B, C)
- Corticosteroids
- Local anesthetics

Pharmacologic Management: Opioids
For moderate to severe pain (and anyone with a serious illness with mild to moderate pain where NSAIDs and acetaminophen use limited)

When converting between opioids or from one route to another:

<table>
<thead>
<tr>
<th>DRUG</th>
<th>IV/SQ</th>
<th>ORAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fentanyl IV</td>
<td>0.1mg = 100mcg</td>
<td>NA</td>
</tr>
<tr>
<td>Hydrocodone/</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acetaminophen</td>
<td>NA</td>
<td>30</td>
</tr>
<tr>
<td>Hydromorphone</td>
<td>1.5</td>
<td>7.5</td>
</tr>
<tr>
<td>Morphine</td>
<td>10</td>
<td>30</td>
</tr>
<tr>
<td>Oxycodone</td>
<td>NA</td>
<td>20</td>
</tr>
<tr>
<td>Tramadol</td>
<td>NA</td>
<td>120</td>
</tr>
</tbody>
</table>

Guides for dosing opioids:
- When increasing an opioid dose: increase by 25-50% for mild to moderate pain and 50-100% for severe pain
- When rotating opioids, find the equianalgesic dose and decrease by 25-50% to account for incomplete tolerance
- The oral breakthrough dose should be 10-20% of the 24 hour total dose

Nonpharmacologic Management
Physical measures: Physical therapy, occupational therapy, recreational therapy, orthotics, heat/cold, ultrasound
Integrative therapies: Acupuncture, music, tai chi, yoga
Interventional therapies: Nerve blocks, kyphoplasty/vertebroplasty, neuraxial infusions
Psychological approaches: Cognitive-behavioral therapies, mindfulness, guided imagery, relaxation
Neuro-stimulatory techniques: TENS, spinal cord stimulation, peripheral nerve stimulation

References:

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aacnnursing.org/ELNEC/resources
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