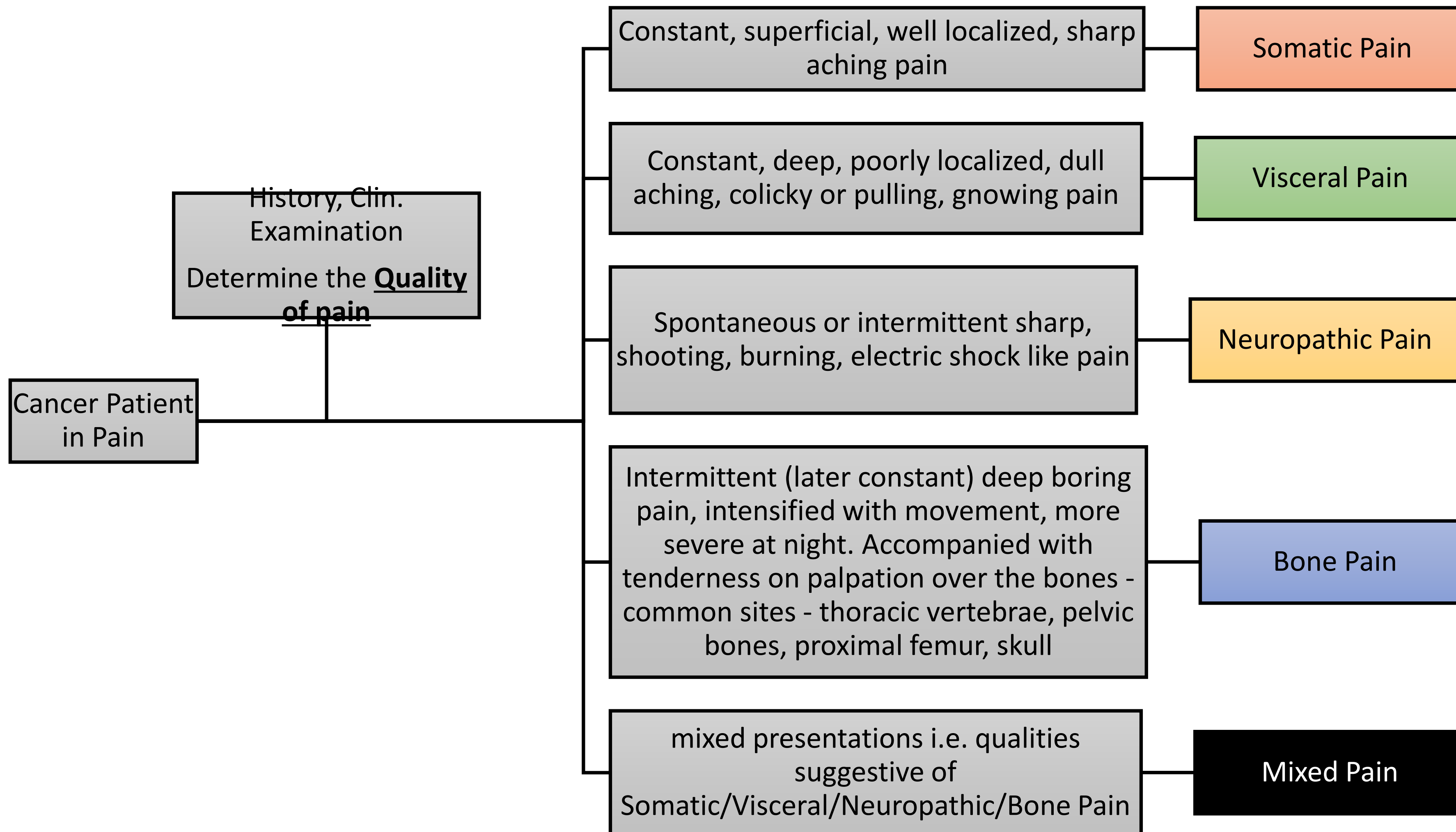
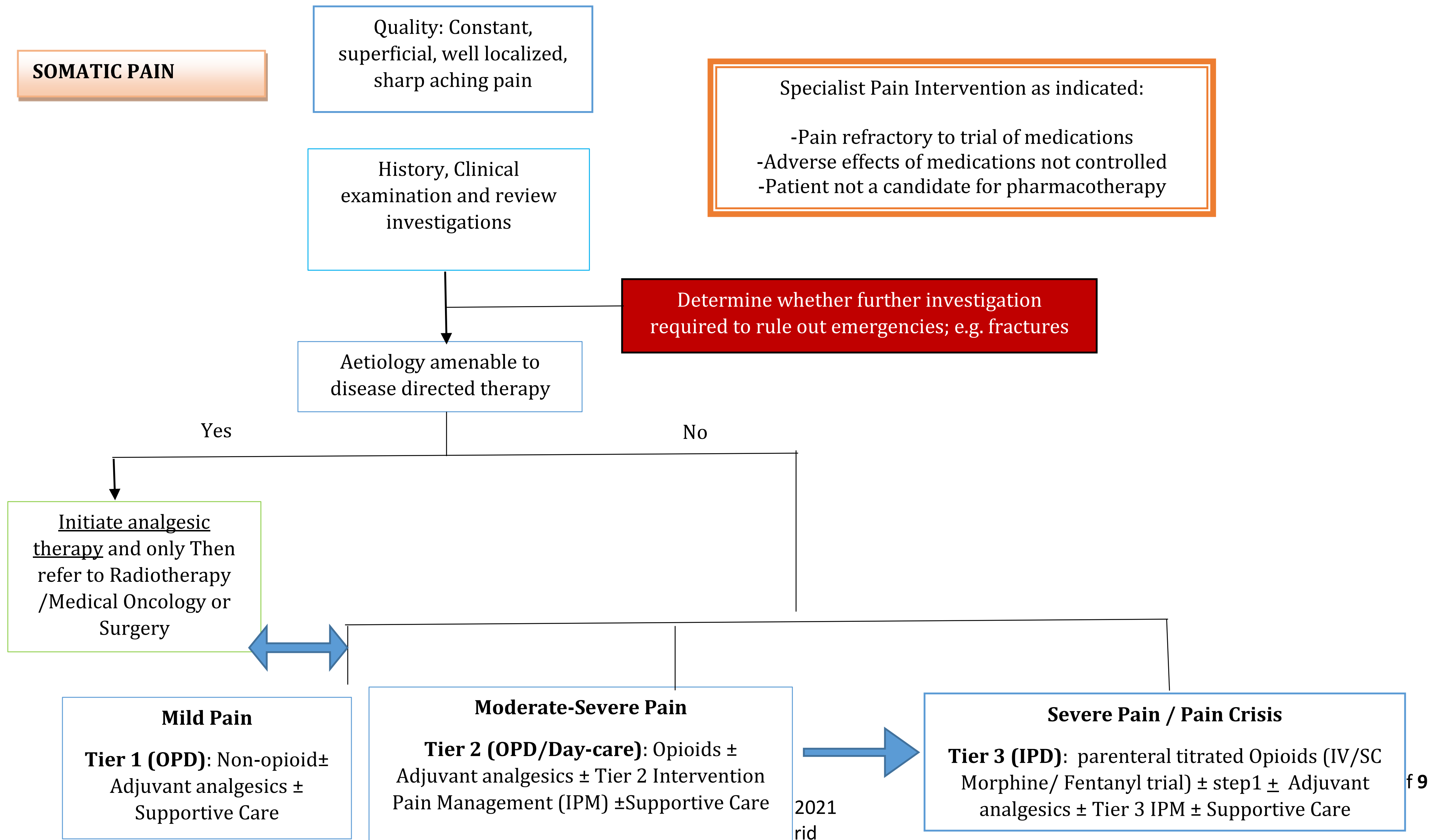
Approach to managing Cancer Pain

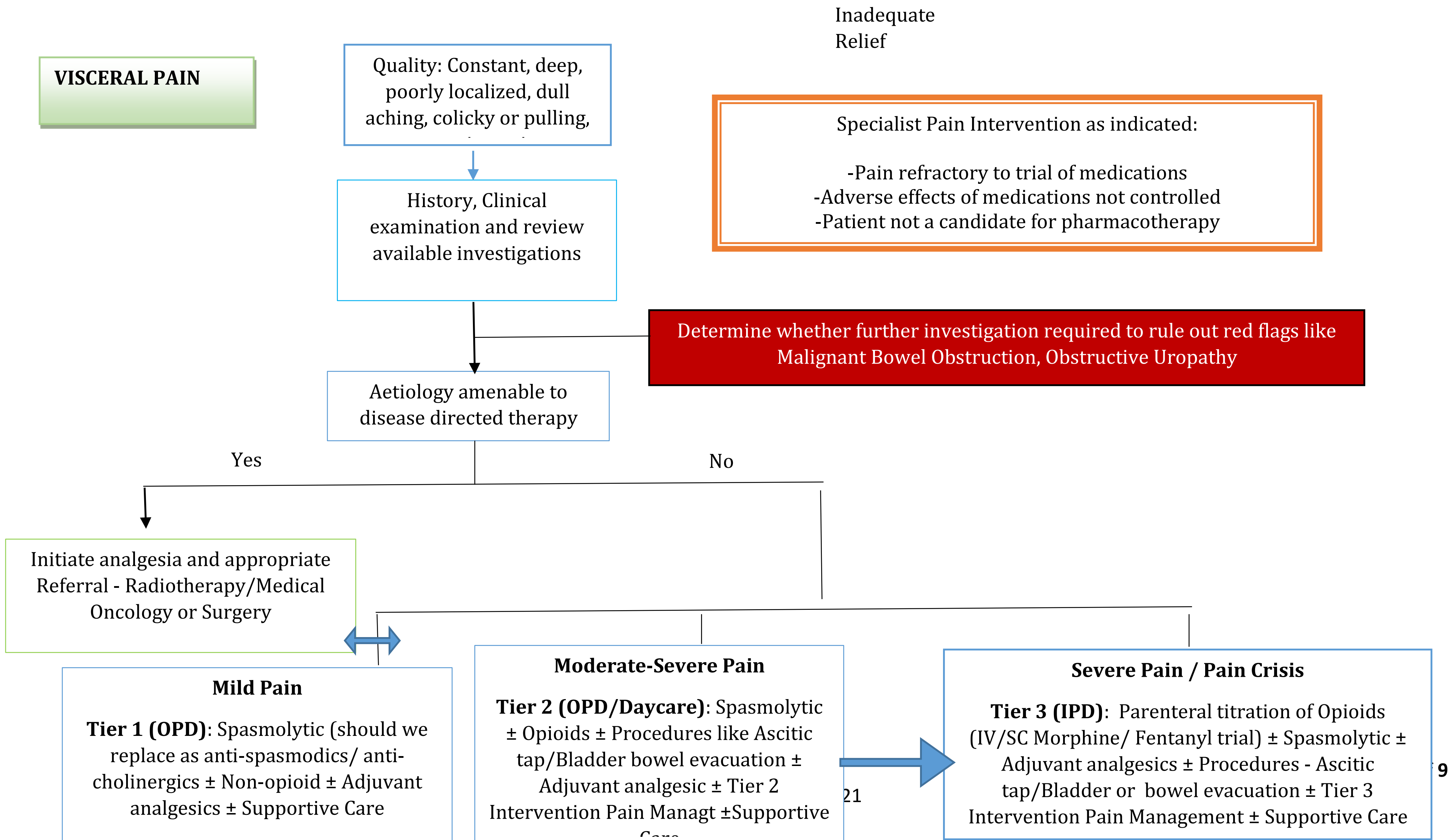


NATIONAL CANCER GRID
COLLABORATION FOR CANCER CARE

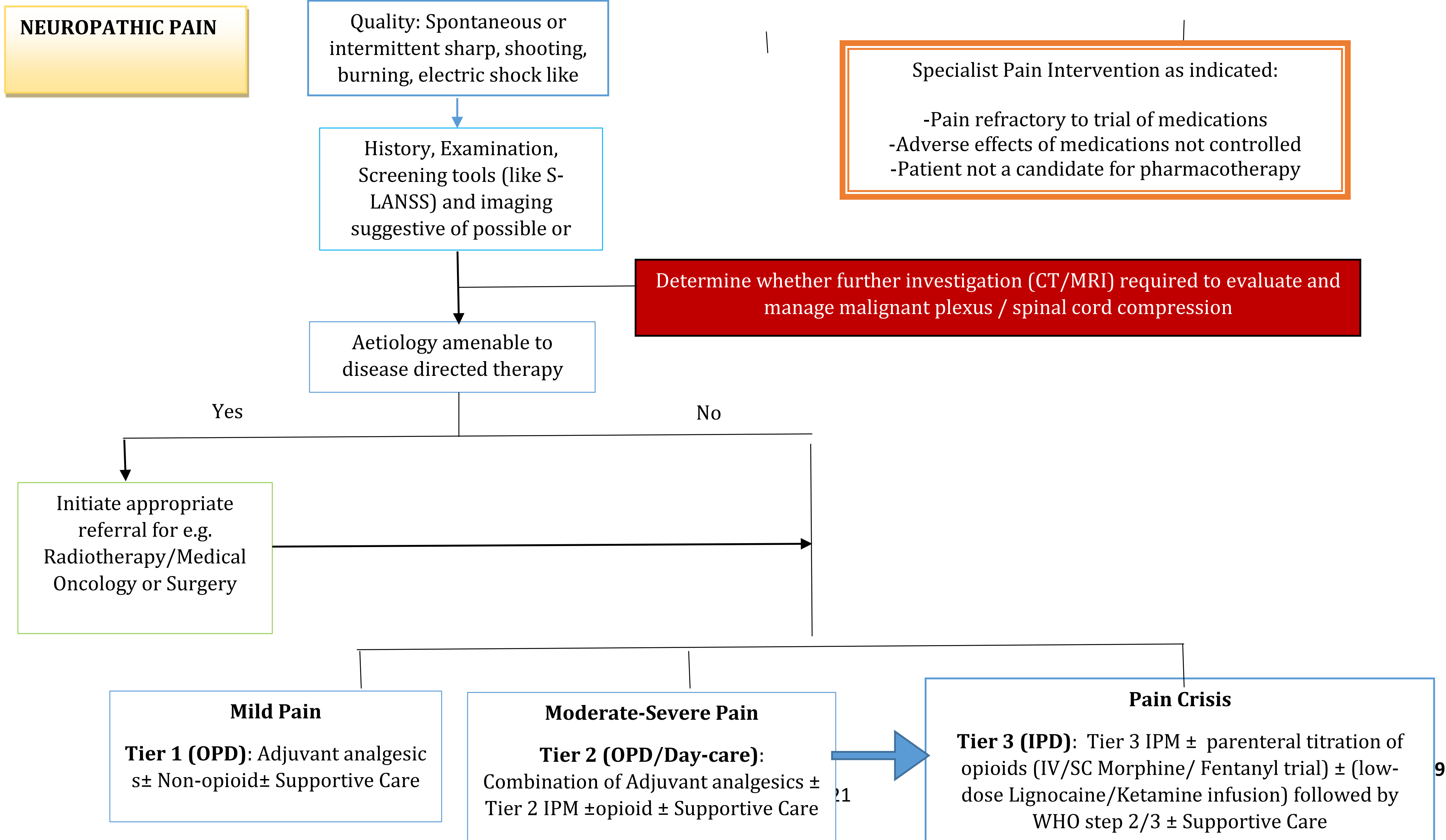
NCG Palliative Care Guidelines – Pain in Cancer Patient

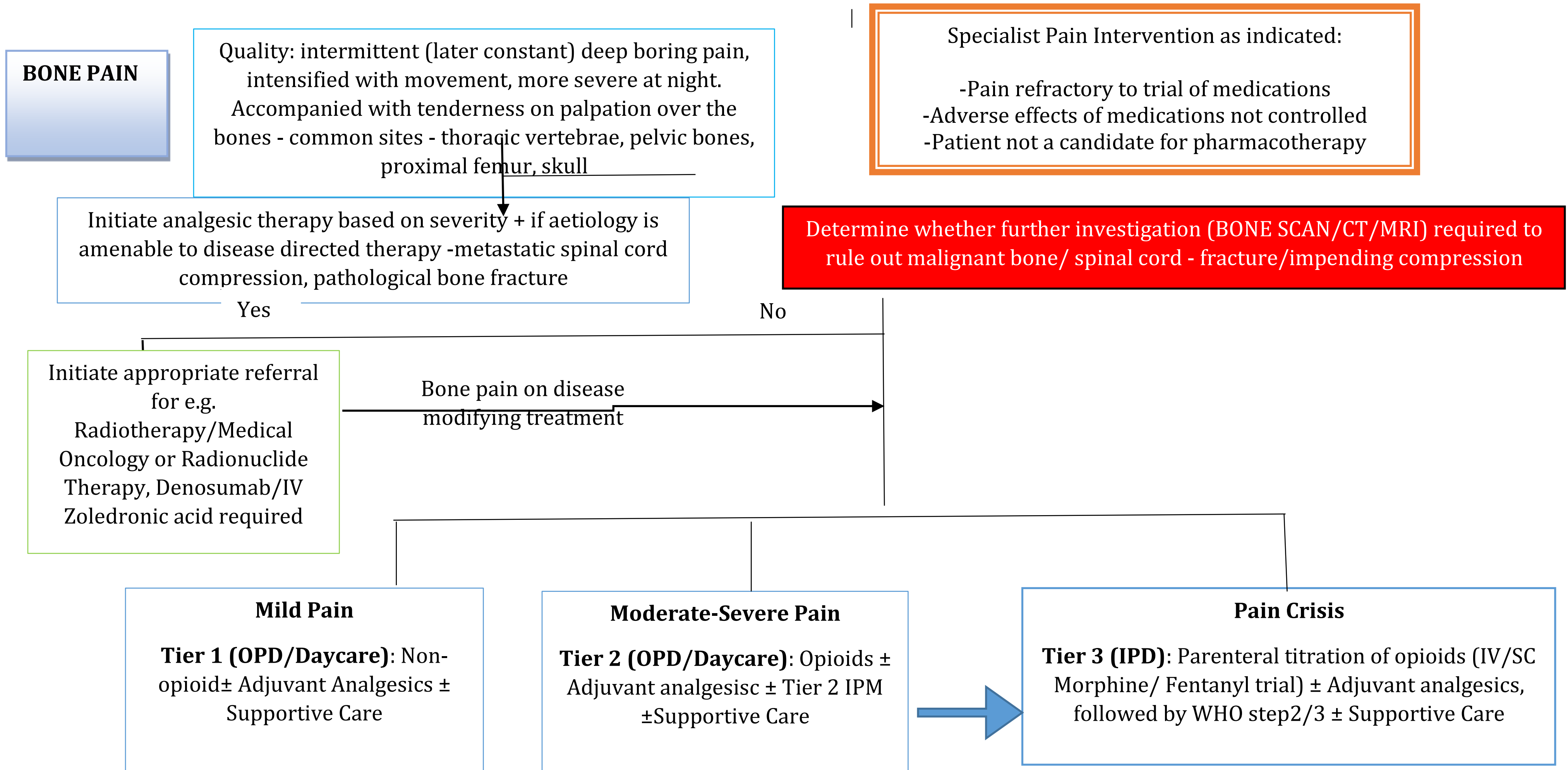


NCG Palliative Care Guidelines – Pain in Cancer Patient



NCG Palliative Care Guidelines – Pain in Cancer Patient




BONE PAIN
Quality: intermittent (later constant) deep boring pain, intensified with movement, more severe at night. Accompanied with tenderness on palpation over the bones - common sites - thoracic vertebrae, pelvic bones, proximal femur, skull
Specialist Pain Intervention as indicated:
-Pain refractory to trial of medications
-Adverse effects of medications not controlled
-Patient not a candidate for pharmacotherapy
Initiate analgesic therapy based on severity + if aetiology is amenable to disease directed therapy -metastatic spinal cord compression, pathological bone fracture
Determine whether further investigation (BONE SCAN/CT/MRI) required to rule out malignant bone/ spinal cord - fracture/impending compression
Yes
No
Initiate appropriate referral for e.g. Radiotherapy/Medical Oncology or Radionuclide Therapy, Denosumab/IV Zoledronic acid required
Bone pain on disease modifying treatment
Mild Pain
Tier 1 (OPD/Daycare): Non-opioid± Adjuvant Analgesics ± Supportive Care
Moderate-Severe Pain
Tier 2 (OPD/Daycare): Opioids ± Adjuvant analgesisc ± Tier 2 IPM ±Supportive Care
Pain Crisis
Tier 3 (IPD): Parenteral titration of opioids (IV/SC Morphine/ Fentanyl trial) ± Adjuvant analgesics, followed by WHO step2/3 ± Supportive Care

MIXED PAIN

Pain descriptors suggestive of multiple pain mechanisms i.e. Somatic/Visceral/Neuropathic /Bone Pain

History, Clinical Examination and review available investigations

Determine whether further investigation required to rule out red flags

Aetiology amenable to disease directed therapy

Yes

Initiate appropriate referral for e.g. Radiotherapy/Medical Oncology or Surgery for disease progression

No

Mild Pain

Tier 1 (OPD): Non-opioid± Adjuvant Analgesic ± Supportive Care

Moderate-Severe Pain

Tier 2 (OPD/Daycare): Opioids ± Adjuvant analgesic ± Tier 2 IPM ±Supportive Care

Pain Crisis

Tier 3 (InPatient): IV Titration of Opioids ± Adjuvant analgesic ± Referral for Interventional pain management (IPM) ± Supportive Care

Specialist Pain Intervention as indicated:

-Pain refractory to trial of medications
-Adverse effects of medications not controlled
-Patient not a candidate for pharmacotherapy

<table>
<tr><th colspan="2">DRUGS (A)</th></tr>
<tr>
<td>STEP 1 analgesics-NON OPIOID
• Paracetamol: 500mg QID up to 4g/day PO or IV (not > 2 G in geriatric patients or with liver disease)
• NSAIDS:
○ Celecoxib: Initially 100mg BD up to 200mg BD PO
○ Ibuprofen: 400mg TDS PO to 200mg TDS in frail elderly
○ Naproxen: 250mg-500mg BD PO upto 1g/day (use with caution)
○ Diclofenac: 50mg bd-tds PO</td>
<td>Precautions when using NSAIDs
• Evaluate the patient – co-moribidities, ongoing medications, allergies
• Avoid in patients with cardio-vascular disease, renal dysfunction, coagulation disoreders, and acid-peptic disease
• Use the smallest effective dose for shortest possible duration
• Maintain hydration and urine output
• Use gastro-protectors Pre-emptively
• Renal toxicities of COX -1 and COX-2 inhibitors are similar. Monitor renal functions if duration of NSAID therapy exceeds few days</td>
</tr>
<tr><td colspan="2">Step 2 analgesics- Weak Opioids
• Codeine: 30mg PO QDS (available in combination with Paracetamol 500mg) avoid use in children <18 years of age
• Tramadol: 50mg QDS (immediate release) maximum 600mg/24h. In renal impairment: 50mg q12h maximum 200mg/24h - Avoid in severe hepatic impairment
• Tapentadol – is considered a step 2 drug, when used as < 200mg / day</td></tr>
<tr><td colspan="2">Step 3 analgesics – Strong opioids
• Morphine:
Oral: Initially 5mg IR q4h in opioid naïve.
Initially 10mg IR q4h for those being switched from regular weak opioid (Morphine Equivalent daily dosage calculation based)
Reduce dose in mild renal impairment to initially 5-10mg q8h-q6h.Avoid in moderate tosevere hepatic and renal impairment.
IV/CIVI: In severe pain crisis- 1mg every 10 min repeated until patient is pain free.
• Fentanyl:
TD: 12mcg/hr, 25mcg/hr, 50mcg/h patch strength available. Change q72h Equianalgesic dose calculated based on current opioid analgesic dosage.</td></tr>
</table>

IV/SC/IM: Initial starting dose 10-50mcg q1h via PCA/Syringe driver under close monitoring.

- **Buprenorphine**:
  TD: 5,10,15,20mcg/h patches available q7days
  SL Tablet: 200mcg,400mcg,2mg, 8mg tablets available
- **Methadone**:
  Opioid naïve: 2.5mg-5mg tablets and 5mg/ml syrup formulations available
  Initial dose: 2.5mg q12h(1-2mg in elderly) and q3h as p.r.n
  Switching from other opioids- use Three day switch/ stop and go method for dose conversion.
- **Tapentadol**
  Starting with 50mg IR PO q4h-6h,titrated as 100mg q4h-150mg q6h up to maximum 600mg/24h
  Stable pain- Tapentadol ER 50mg-150mg q12h
  With mild- moderate hepatic impairment: 50mg q8h IR is starting dose maximum 200mg/24h avoid in severe renal & hepatic impairment.

Adjuvant analgesics: Select as per pathophysiology of Pain

- Antidepressants: Best NNT
  Amitriptyline: 10 PO HS , increase every 1-2weeks by 25mg up to 150mg maximum
  Duloxetine: start at 30mg PO once daily increase to 60mg after 1-2 weeks upto 60mg PO BD maximum
- **Anti-epileptics**:
  Pregabalin: 75mg PO Hs and intervals of 3-7 days titrate upto maximum 600mg/24h. Dose reduction in elderly & renal impairment.
  Gabapentin: Start at 300mg PO HS and titrate upto a maximum effective dose 1800mg/24h and maximum tolerated dose 3600mg/24h
- NMDA receptor channel blocker:
- **Ketamine**:
  Oral: 10-25mg TDS-QDS, maximum 200mg QDS
  CIVI: 50-150mcg/kg/hr (typically 50-100mg/24h)
- **Zolendronate**: 4mg IV in 0.9% saline/5% dextrose over 15-30 mins every 3-4 weeks, dose reduction in renal impairment.
  Ibandronate: ORAL 150 mg OD monthly in those with normal renal function; 50mg PO OD, 50mg PO alternate day in mod renal impairment & 50mg PO once a week in severe renal impairment.
  IV: 6mg IVI in 100ml 0.9% NS/5% Dextrose over 15-30 mins every 3-4 weeks, 4mg in mod renal impairment and 2mg in severe renal impairment.
- **Denosumab**: 120mg SC once every 4 weeks
- **Skeletal Muscle relaxants**:
- **Baclofen**: 5mg-10mg PO OD-TDS
  Flupirtine: 100-200ng TDS maximum 600mg/24h
  Chlorzoxazone: 250-750 mg PO q6-8hr
  Thiocholchicoside: 4-8mg q12h for maximum of 7 days

• **Corticosteroids**: Dexamethasone: 8-16mg initial PO/IV dosage Higher doses for spinal cord compression • Bisphosphonates:	• **Antispasmodics**: Hyoscine butylbromide: 20mg q6-8h, maximum up to 300mg/24h Dicyclomine: 20 mg PO q6hr maximum 80mg/24h

SUPPORTIVE CARE (B)

Education/ communication	MDT – Referrals	Supportive Equipment
• Educating patient and caregiver about analgesic dosage, breakthrough pain dosages, side effects and use of laxatives/antiemetic with opioids. • Communicating the need for regular timely dosages to prevent breakthrough pain episodes, daily pain diary, reporting to clinic if Pain persists despite medications.	• Physio/ occupational therapy: Physical range of movement exercises, energy conservation techniques, positioning, assist aids/devices. • Psycho-oncology to address the psychological distress due to chronic pain. • Dietician to advise diet accordingly in patients with dysphagia/odynophagia	• Walking aids to prevent weight bearing. • Taylor's brace/splints/arm slings/Limb immobilisation brace • Transcutaneous Electrical Nerve Stimulator - TENS • Ambulatory infusion devices

PROCEDURES (C)

Tier 2 Interventions	Tier 3 Interventions

• Intervention Pain Management
  o Trigger point injections
  o Epidural analgesia
  o Peripheral nerve blocks
  o Nerve block - Superficial
• IV Lignocaine Infusion
• IV Ketamine Infusion
• Parenteral (SC/IV) Morphine, Fentanyl trial
	• Intervention Pain Management
	  o Plexus Block
	  o Neurolytic Block
	  o Nerve block (continuous catheter)
	  o Neuraxial block : epidural catheter
	  o Radiofrequency neurotomy
	  o Sympathetic block and neurolysis
	  o Ultrasound guided interventions
	• IV Infusion of analgesics
	• Fluoroscopic guided interventions