Neuropathic Pain
Evidence-based Treatment Algorithm (adapted from 1-2) for 1st Care

Topical lidocaine if PHN or focal neuropathy

Ineffective, partial response or not focal

Initiate First-line Monotherapy TCA5 or Gabapentin/Pregabalin3-4

Ineffective or not tolerated

Consider Venlafaxine4 or Duloxetine5

Ineffective or not tolerated

Consider Opioid or Tramadol1,2,4

Ineffective, partial response or not tolerated

Pain Specialty Service referral

Other therapies - Limited evidence
- Carbamazepine
- Oxcarbazapine
- Valproate
- Topiramate
- Lamotrigine
- Phenytoin
- Mexiletine
- Levetiracetam

Switch to alternate 1st line agent

Ineffective or not tolerated

Consider adding alternate 1st line agent

Ineffective, or not tolerated

Partial response

Partial response

Partial response

Pain Clinic supervision recommended:
- Methadone
- Lidocaine
- Ketamine
- Cannabinoids

**Tricyclic Antidepressants (TCAs)**
- NNT= 1.7-2.5; NNH (minor)=4.6; NNH(major-drug W/D)=14.7
- Baseline- ECG (age >65); Lying/Standing BP
- Nortriptyline or Amitriptyline 10§-25mg qHS
- Titrate 10mg increments every 3-7 days if tolerated to MAX: 75§-150mg qHS
- Adequate trial: **6-8 week titration & 1-2 weeks at maximum dose**
- Common SE: constipation, dizziness, xerostomia, blurred vision, orthostatic hypotension

**Gabapentin (Neurontin®)**
- Initial 100§-300mg/day @HS, titrate 100-300mg/day q7 days to max: 2400mg/day
- Divide dose once dose > 300mg/day
- Adjust interval tid if CRCL< 60mL/min; bid<30mL/min
- Slow titration to avoid emergent SE
- Adequate trial: **10wks & 2 wks at max tolerable dose**
- Common SE: dizziness, drowsiness, gait disturbances, cognitive decline

**Pregabalin (Lyrica®)**
- Initiate 25§-50mg bid; titrate by 25-50mg q 2-7 days to max: 400§-600mg/day
- Adjust to daily if CRCL < 30mL/min
- Adequate trial: **4-5 weeks titration, 1-2 weeks at max tolerable dose**
- Common SE: dizziness, somnolence, edema, dry mouth, headache

**Venlafaxine (Effexor®)**
- NNT= 3.1
- Start 37.5mg daily; titrate to 75-225mg daily every 3-7 days
- Adequate trial: **4-5 weeks titration, 1-2 weeks at max tolerable dose**
- Adjust CRCL < 60mL/min: reduce usual dose by 25-50%
- Adjust mild-mod hepatic impairment: reduce usual dose by 50% or more
- Common SE: hypertension, sweating, anorexia/wt loss, dizziness, nerves

**Duloxetine (Cymbalta®)**
- NNT =6; NNH (drug W/D)=15
- Initial: 30mg daily for 1-2 weeks, increase to 60mg daily if necessary
- Adjust CRCL < 60mL/min: reduce dose; titrate slower – do NOT use at CRCL < 30mL/min
- Hepatic insufficiency – do NOT USE
- Common SE: diaphoresis, constipation, anorexia, dizziness, fatigue

**Tramadol (various forms)**
- Tramacet® (Acetaminophen 325mg + tramadol 37.5mg)- immediate release (IR)
- NNT=3.8; NNH= 8.3 (IR data only)
- Start 2 tabs bid x 1-2 weeks, titrate to max of 2 tabs q6h.
- Adjust CRCL < 30mL/min – q12h interval
- Hepatic insufficiency- do NOT use
- **Extended release products**: Zytram®, Raliva®, Tridural® (do not interchange)
  - Initial: 100mg daily; titrate by 100mg/day q5 days to max 300mg/day-swallow whole
  - Do NOT USE CRCL < 30mL/min or hepatic insufficiency
  - Common SE: flushing, pruritis, constipation, fatigue, tremor, HA, dizziness

NNT = numbers needed to treat to obtain 1 patient achieving greater than 50% pain relief
NNH= numbers need to treat to experience adverse effects
§Use lower dose range if age> 65 years or history of sensitivity to CNS meds
Dosage & SE information referenced from Micromedex.