

KENNEDY PHARMACY

Doctor's Pavilion, University of Medicine and Dentistry

42 East Laurel Road, Stratford, N.J. 08084

Phone (856) 346-3535 Fax (856) 346-4953

Resources for Health Care Professionals

Algorithm for Chronic Neuropathy

Page 1 of 2

Mode of Action and members of the class (not exhaustive)

1) NMDA-Ca Channel Blocker

Ketamine 5-10% in PLO, 10-30mg PO or PR tid regularly + up to q2h prn

Nasal soln 10-50mg/ml-1-2 sprays prn

Orphenadrine 10% in PLO or 100mg PO tid

Dextromethorphan 10% in PLO or <400mg/day PO

Amantadine 200mg/250-500cc IV over 3 hours once (repeat x1 prn).

PLO 10 to 20% tid

2) AMPA-Na Channel Blocker

Anticonvulsant - * Gabapentin 6-10% in PLO tid + up to q2h prn

or up to 2-3Gm/day PO

*Probably blocks glutamate at the NMDA also

Carbamazepine 10% in PLO tid + up to q2h prn

or 100mg-200mg PO bid/tid (Max 800mg/day)

Antiarrhythmic - Lidocaine 5-10% in PLO tid + up to q2h prn

Mexilitine 2% in PLO tid + up to q2h prn

3) Alpha II-agonist

Clonidine 0.2% in PLO tid + up to q2h prn

4) Substance P blocker

MU agonists (MS, Hydrocodone, Oxycodone, etc) (low dose) PO or PLO

MU agonist also: Loperamide 7% and up PLO

5) GABA_b Agonist

Baclofen 2% PLO tid + up to q2h prn

Non-specific GABA agonist - Klonopin 0.5mg-1mg SubL. Qhs

6) Tricyclic Antidepressant

Desipramine 2-10% in PLO tid + up to q2h prn

or 25-100mg PO qHS

Amitriptyline 2-10% in PLO tid + up to q2h prn

or 25-150mg PO qHS

Important Caution — Please Read This: The information provided about is compiled from sources believed to be reliable. However the accuracy and completeness of this work cannot be guaranteed. This information is intended to be used as a guide only, and health care professionals should use clinical judgment to and individualize therapy to each specific patient care situation. This work is not meant to be a replacement for training, experience, continuing medical education, studying the latest drug prescribing literature, raw intelligence or common sense.

KENNEDY PHARMACY

Doctor's Pavilion, University of Medicine and Dentistry

42 East Laurel Road, Stratford, N.J. 08084

Phone (856) 346-3535 Fax (856) 346-4953

Resources for Health Care Professionals

Algorithm for Chronic Neuropathy (continued)

Page 2 of 2

Magnesium: Intracellular Resident NMDA Ca Channel Blocker

For Fibromyalgia - Mg/Malic Acid 25/250 mg PO tid
Or 500mg PLO tid

For Diabetic Neuropathy - Lipoic Acid 100mg-300mg PO tid
Bioflavonoids/citrus 500 to 2000 mg PO tid
Gotu Kola 30 to 60 mg PO tid
Nifedipine 2 to 5% PLO tid
Or up to 16% for small areas, i.e., toes

Alpha-antagonist (I & II)

Phentolamine 80mg over 24 hours slow IV one time only!
(for organic neuropathy, i.e., pancreatic cancer).

Notes:

1. Ketamine 10%, Gabapentin 6%, Clonidine 0.2% is standard starting regimen.
2. Add Baclofen 2%, Amitriptyline 2%, Nifedipine, Opioid, Mg as needed. (i.e., use Baclofen specifically in FM patients but also in others and use Amitriptyline in CRPS Type I patients but also in others.)
3. In allodynic Post Herpetic Neuralgia use Ketamine 10% + Bupivacaine 0.5% in a Normal Saline spray to the area, wait 5 to 10 minutes and apply the PLO gel chosen. This spray also has been reported to ease burn pain.
4. Evidence exists for presence of NMDA receptors in the dermal-epidermal junction. AMPA receptors always lie close to NMDA receptors.
5. Evidence exists for the presence of Gabapentin receptors in the periphery.
6. Evidence exists for the presence of adrenergic receptors in the periphery.
7. Evidence exists for the presence of opioid receptors in the periphery.

References:

1. Jones M. Chronic Neuropathic Pain: Pharmacological Interventions in the New Millennium – A Theory of Efficacy. *International Journal of Pharmaceutical Compounding*. Jan/Feb 2000; 4(1): 6-15.
2. Jones M. Clinical Nuggets and Pearls: Chronic Neuropathic Pain and Opioid Tolerance. *International Journal of Pharmaceutical Compounding*. Jan/Feb 2002; 6(1): 4-6.

Important Caution — Please Read This: The information provided about is compiled from sources believed to be reliable. However the accuracy and completeness of this work cannot be guaranteed. This information is intended to be used as a guide only, and health care professionals should use clinical judgment to and individualize therapy to each specific patient care situation. This work is not meant to be a replacement for training, experience, continuing medical education, studying the latest drug prescribing literature, raw intelligence or common sense.