Neuropathy Medication for Diabetes

Prevention – Maintain glycemic control; quit smoking, alcohol reduction, exercise.

Pathogenetically Oriented Therapy

• Alpha lipoic acid 600 – 1,800 mg a day

Prescription Therapy:

1st line – Tricyclic Antidepressants (Amitriptyline, Nortriptyline, Desipramine)

- Calcium Channel Modulators (Gabapentin, Pregabalin)
- Serotonin Norepinephrine Reuptake Inhibitors (SNRI Venlafaxine, Duloxetine)

2nd Line

- Topical Capsaicin Cream for localized pain Apply 2-4 x daily for up to 8 wks
- Opioids (Tramadol, Oxycodone)

Reasons for Treatment Failure

- Dose too low
- Inadequate trial requires 2-8 weeks of treatment to observe symptom reduction
- Pt expecting elimination of symptoms only reduces symptoms by about 50%
- Incorrect diagnosis: If in doubt, refer to neurologist
- If patient does not respond or has adverse effects, change medication class
- In patient has some but inadequate relief, raise the dose and consider adding or changing meds.

References: Ziegler, D. Painful diabetic neuropathy. Diabetes Care 2009; 32 (Supp 2): S414-S419

Class Generic / Trade Usual Daily Dose Comments Side Effects / Caution				
Class	•	Usual Daily Dose	Comments	Side Effects/ Caution
	Name	Range		
1 st Line Agents	Amitriptyline / Elavil	25 – 100 mg*	Usually 1 st	Take 1 hour before sleep.
Tricyclic Antidepressants TCA Improves neuropathy and depression	Nortriptylline / Pamelor Desipramine / Norpramine	Avg dose 75mg 25 - 150 mg* (for burning mouth) 25 - 150 mg* *Increase by 25mg weekly till	choice Less sedating and anticholinergic	Side effects; dry mouth, tiredness, orthostatic hypotension. Caution: not for pts w/ unstable angina (<6 mo), MI, heart failure, conduction system
		pain relieved		disorder.
Calcium Channel Modulators	Pregabalin / Lyrica *FDA approved for	100 - 1,200mg TID 50 - 200mg TID	Improves insomnia, fewer drug interactions	Sedation, dizziness, peripheral edema, wt gain Caution ; CHF, suicide risk, seizure disorder.
	neuropathy treatment	60 1 11		
Serotonin Norepinephrine Reuptake Inhibitor	Puloxetine / Cymbalta *FDA approved for neuropathy treatment	60 mg daily Start at 30 mg	Improves depression, insomnia	Nausea, sedation, HTN, constipation, dizziness, dry mouth, blurred vision.
SNRI	Venlafaxine/ Effexor	75 - 225 mg daily		Caution : adjust dose for renal insufficiency, do not stop abruptly, taper dose.
2 nd Line Agents	Weak opioids	50 – 400 mg	Sedation, nausea, constipation (always prescribe stool softener) Caution: abuse, suicide risk, short acting opioids not recommended for long term tx, can develop tolerance	
Opioids	Tramadol / Ultram Strong opiods Oxycodone / Oxycodone	10 – 100 mg		
Local Treatment	Capsaicin Cream (0.025%) Apply 2-4 x daily for up to 8 wks			
Other choices	If above medications not effective, contraindicated or intolerable consider: Buproprion/Wellbutrin Paroxetine / Paxil Citalopram / Celexa Toprimate/ Topamax Topical Lidocaine (for localized pain).			