



BCPRA Guidelines and Drug Choices for Chronic Pain in Hemodialysis Patients

Musculoskeletal/Nociceptive Pain

Pain score 1 to 4 out of 10

Non opioid analgesics are first line of treatment.

Acetaminophen (including acetaminophen arthritis formulation): Max. 4 g/day; caution if Hx of EtOH, other liver enzyme inducer (e.g. rifampin), and heart failure. Follow GGT & ALT q3months if dose >2.6 g/day.

Topical NSAIDs: Apply tid to qid for localized pain (diclofenac 5 to 25% in Phlojel, diclofenac gel 1.16% (OTC)).

Capsaicin cream 0.025% or 0.075%: Apply bid to qid for localized pain (may take >2 weeks for onset of action).

Pain is not controlled or initial pain score is ≥5 out of 10

Add an opioid to non-opioid analgesic and or adjuvant:

AVOID MORPHINE AND MEPERIDINE

Complete opioid abuse risk assessment scale.

Dosage can be titrated qHD run based on pain assessment.

Hydromorphone IR: 0.25 to 0.5 mg PO q3-4 hours PRN (Note: neurotoxic metabolite H3G accumulates if HD D/Ced)

Oxycodone IR: 1.25 to 2.5 mg PO q3-4 hours PRN

Percocet (acetaminophen 325 mg-oxycodone 5 mg) can be used to reduce pill burden once pain control is optimized.

Regular opioid dosing (e.g. hydromorphone 0.5 mg PO q3hours regularly) should be considered for patient with severe pain (pain score of 7 to 10 out of 10).

Once analgesic requirement is stable, consider conversion to long-acting opioid agent. Continue providing short-acting opioid agent for breakthrough pain (1/10th total daily dose q2 hours PRN)

Hydromorphone CR: PO q12 hours (available in 3 mg increments)

Oxycodone CR: PO q12 hours (available in 10 mg increments)

Note: If pain management not optimal before next scheduled SR dose, consider giving 1/3 total daily dose of hydromorphone or oxycodone CR q8 hours.

Fentanyl transdermal patch: Initial dose: 12 µg/h patch q3 days, increase dose to next patch size every 2nd HD run. Caution in opioid naïve patient. Fentanyl patch strengths available: 12 µg/h, 25 µg/h, 50 µg/h, 75 µg/h, 100 µg/h.

Alternative agents:

Tramadol (Ultram®): Option for moderate pain (5 to 6 out of 10 without opioid). It has opioid activity (binds to µ receptor) and inhibits reuptake of serotonin and norepinephrine. Initial dosage: 25 mg PO daily to bid (max. daily dose 100 mg PO bid) (Tramadol CR (Zytram XL®) is contraindicated for CrCl <30 ml.min.

Acetaminophen 325mg and tramadol 37.5 mg (Tramacet®): 1 TAB PO bid. Maximum daily dose: 2 TAB PO bid.

Buprenorphine transdermal patch: Option for moderate pain (5 to 6/10 without opioid). Minimal renal elimination. Initial dosage: 5 to 10 µg/h patch q7 days, even for patients not naïve to opioid. Dose can be increased q7 days. Max dose: 20 µg/h q7 days. Acetaminophen should be used for breakthrough pain. Caution for withdrawal symptoms if switching from other opioids.

Methadone: Option for opioid allergy, adverse effects/refractory pain not controlled by other opioids or if patient taken off HD.

Required authorization from CPSBC to prescribe methadone for analgesia. Baseline QTc and repeat EKG if daily dose >60 mg. Many drug interactions (e.g. macrolides, fluoroquinolones, fluconazole etc.) Initial dose: 1 or 2 mg PO or SL tid and titrate dose gradually every 2nd HD run.

Neuropathic Pain (Defined by ≥ to 4 of the following symptoms: burning pain, pain to cold, electric shocks, tingling, pins and needles, numbness, itchy, increase pain with light touch, decrease sensation)

Pain score 1 to 4 out of 10

Gabapentin: 100 mg PO hs and titrate weekly by 100 mg/day. Maximum dose: 300 mg/day. Adequate trial duration: 4 to 6 weeks.

Capsaicin cream 0.025% or 0.075%: Apply bid to qid for localized pain (may take >2 weeks for onset of action).

Intolerable adverse effects (e.g. sedation, dizziness)

Pain control is inadequate at target dose for 2-4 weeks or initial pain ≥5 out of 10

Taper off Gabapentin

Nortriptyline/Desipramine: 10 mg PO daily (give dose at hs for nortriptyline) and titrate weekly by 10 mg/day. Maximum dose: 100 mg/day. Should be used with caution in patients with history of cardiac disease. Combination TCA + gabapentin can provide better pain control for diabetic polyneuropathy and postherpetic neuralgia.

Nabilone: 0.25 to 0.5 mg PO hs and titrate weekly by 0.25 to 0.5 mg/day. Maximum dose: 2 mg/day. Capsule strengths available: 0.25 mg, 0.5 mg and 1 mg.

Topiramate: 25 mg PO daily and titrate every 1 to 2 weeks by 25 mg/day. Maximum dose: 200 mg/day (dosed daily or bid).

Venlafaxine: 37.5 mg PO daily, and titrate in 1 week to 75 mg PO daily

Pregabalin: 25 mg PO hs and titrate weekly by 25 mg/day. Maximum dose: 75 mg/day. Dose to be given post-HD on HD days. No data to support use of pregabalin in gabapentin resistant or intolerant patient.

THC:CBD (Sativex®): 1 spray under tongue or toward inside of cheeks daily to bid. May increase by 1 spray/day qhd run. Maximum dose: 12 sprays/day. Limited data in renal failure patients. May worsen orthostatic hypotension.

Additional options (see chart): clonidine, tizanidine, benzodiazepines, baclofen.

Inadequate response

OPIOID CONVERSION TABLE (for patients on chronic opioids)*

Drug	Parenteral	Oral
Morphine	10 mg	20 mg to 30 mg
Hydromorphone	2 mg	4 mg
Oxycodone	N/A	20 mg
Codeine	120 mg	200 mg
Fentanyl	100 µg (0.1 mg)	N/A
Fentanyl Patch	** see below	
Buprenorphine Patch	** see below	
Methadone	N/A	variable – start at 1/10th morphine dose

* As per PHC/VCH opioid conversion table (last update Jan 15/2010)
** Recommended conversion from PO daily hydromorphone equivalent to fentanyl and buprenorphine:

Hydromorphone (mg/24 hrs)	Fentanyl (µg/hr/)	Buprenorphine (µg/h)
< 6		5
6-12		10
12-26	25	20
27-35	37	
36-44	50	
45-53	62	
54-62	75	
63-71	87	
72-80	100	

Pain Management Agents Cost Coverage

Drugs covered under BCPRA

Drugs covered under Pharmacare

Drugs needing a special authority request to be covered under Pharmacare

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