

Chlorpromazine HCl Injectable

Sandoz Canada Inc., the sole supplier of chlorpromazine hydrochloride injectable, has discontinued marketing this product in Canada.¹

Indications for injectable chlorpromazine^{2,3}

- Symptomatic management of psychotic disorders when oral route not available
- Prevention and treatment of nausea and vomiting
- Treatment of intractable hiccups (off-label)

Alternate formulations of chlorpromazine

- Oral products available:
 - Teva- chlorpromazine tablets, 25 mg, 50 mg, 100 mg⁴
- Compounded parenteral chlorpromazine using bulk chemical
 - Powder listed in Medisca catalogue⁵

Therapeutic alternatives for chlorpromazine injectable

1. Short-acting injections for symptomatic management of psychotic disorders^{2,6}

Drug (chemical class)	Strength	Dose	Time to peak plasma level	Elimination Half-life
Methotrimeprazine* (first generation, low potency, aliphatic phenothiazine)	25 mg/ml ampoule	25 mg IM daily up to 4 times daily (deep IM injections) Can be given IV but IM preferred route	30 – 90 minutes	16 – 78 hrs
Haloperidol (first generation, butyrophenone)	5 mg/ml ampoule	2 – 5 mg IM (0.5 – 1 mg in elderly) q4-8h; may repeat every 1 hour if req'd (max 20 mg/day, elderly 5 mg/day)	10 – 20 minutes	12 – 26 hrs
Loxapine (first generation, dibenzoxazepine)	50 mg/ml ampoule	12.5-50 mg IM q4-6h PRN	2 – 5 hrs	8 – 30 hrs
Olanzapine (second generation, thienobenzodiazepine)	5 mg/ml in 10 mg vial	10 mg IM to start, (2.5 – 5 mg in elderly); 2 nd dose of 5 – 10 mg 2 hrs after first if needed; if 3 rd dose needed, give 4 or more hours after 2 nd dose (max 30 mg/day)	15 – 45 min	21 – 54 hrs

* Closest match to chlorpromazine chemically

2. Injectable drugs for prevention and treatment of nausea and vomiting (list not inclusive)^{2,7}

Drug	Strength	Recommended dose
Dopamine antagonists		
Haloperidol	5 mg/ml; 1 ml ampoules	2 – 5 mg IM q2h PRN (adult)
Methotrimeprazine	25 mg/ml; 1 ml ampoules	Adult: 6.25-25 mg IV; 10-25 mg IM q8h PRN; 12.5-50 mg SC q4-6h PRN
		Ped: 0.0625-0.125 mg/kg/day IM in one or divided doses
Metoclopramide	5 mg/ml; 2ml, 10 ml, 30 ml vials	10 – 20 mg IV/IM up to QID (adult)
Antihistamines		
Dimenhydrinate	10 mg/ml IV; 5 ml vials 50 mg/ml IM; 1 ml ampoules	Adult: 50 – 100 mg IV/IM q4-6h PRN (max: 400 mg/24 hrs)
		Ped: 5 mg/kg/day or 150 mg/m ² /day in 4 divided doses (max: 300 mg/24h)
		PONV: 50 mg pre-operatively, repeat post-operatively PRN to max 400 mg/24 hrs
Diphenhydramine	50 mg/ml; 1 ml ampoules	Adult: 25 – 50 mg IV/IM q4h (max: 400 mg/24 hrs)
		Ped: 5 mg/kg/day or 150 mg/m ² /day in 4 divided doses (max: 300 mg/24h)
Serotonin antagonists		
Ondansetron	2 mg/ml; 2ml, 4 ml ampoules	PONV Adult: 4 mg IV immediately before anesthesia or post-operatively
		PONV Ped: 0.1 mg/kg IV; max: 4 mg/kg
PONV – post-operative nausea and vomiting		

3. Injectable drugs for intractable hiccups^{2,7,8}

- Haloperidol 2 – 5 mg IV or IM every 2 hours for 5 to 7 doses. (Not approved for IV but strong supporting documentation for use and safety of this route.)
- Metoclopramide 5 - 10 mg IV or IM every 8 hours

Prepared by Karen Jensen MSc, BSP; Reviewed by Carmen Bell BSP | medSask, June 2016



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