**Access to Drugs for End of Life Care in the BC Lower Mainland Community: COVID-19 Pandemic**

March 31st, 2020

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It has become apparent over recent weeks that a number of drugs regularly used by palliative care services in the community are in short supply or not available.

The most notable problems have been apparent with injectable drugs in particular Midazolam, Hydromorphone and Methotrimeprazine all of which are on limited supply. Oral Dexamethasone is currently not available though some pharmacies may have remaining stocks.

We have attempted to draw up a list of drug shortages for BC but that has proven difficult as the situation is fluid and many of the injectable drugs while in short supply are being provided to pharmacies where more of those drugs are particularly dispensed for specific purposes. This process is called “Allocation”. We therefore concluded that it might be better to list pharmacies which are likely to have a reliable supply of these drugs – mainly because they supply services requiring regular supplies of these drugs such as pharmacies providing the end of life lock boxes for use by community nurses in the homes (Shoppers Drug Mart, 885 Broadway), and pharmacies providing dispensing to patients visiting hospital clinics (MacDonald’s on Broadway in the Fairmont Building) and pharmacies providing injectable drug prescriptions in the downtown area (Shoppers on Davie and Thurlow).

In general these pharmacies can get access to drugs required for End of Life care and do have small but steady supplies in stock. Macdonalds in particular informed us they have plenty of supplies for their renal labs which they are able to access.

Below is a list of the pharmacies we have been able to establish do have a continuing (if limited) supply of most or all injectable drugs required for end of life care in the community. We would recommend judicious prescribing of these drugs to avoid stockpiling and wastage at this difficult time. In particular one of the main companies supplying Midazolam across the country informed me that they are prioritizing supplies to hospitals for ICU patients, but will continue to provide limited supplies to all their regular pharmacies that dispense it regularly for palliative care and other interventions e.g. dental procedures.

**Abbotsford**

Medical Tower Drugs

2151 McCallum Road

Abbotsford, BC V2S 3N8

Tel: 604 859 7651

**Burnaby**

Pharmasave-Rosser

4367 Hastings Street

Burnaby, BC V5C 2J7

Tel: 604 298 5910

**Chilliwack**

Shoppers Drug Mart #217

45905 Yale Road

Chilliwack, BC V2P 2M6

Tel: 604 792 7377

**Delta/Ladner/Tsawwassen**

London Drugs #037

5237 – 48th Avenue

Delta, BC V4K 1W4

Tel: 604 946 5642

**Langley**

Shoppers Drug Mart #258

100 – 22196 50th Avenue

Langley, BC V2Y 2V4

**Maple Ridge/Pitt Meadows**

Shoppers Drug Mart #2204

(Westgate), 130 – 20395 Lougheed Hwy, Maple Ridge, BC V2X 2P9

Tel: 604 465 8123

**Mission**

Shoppers Drug Mart #2208 (Mission Hills)

206 – 32530 Lougheed Hwy

Mission, BC V2V 1A5

Tel: 604 826 1244

**Surrey**

Delta Prescription Clinic

101 – 8425 – 120th Street

Delta, BC V4C 6R2

Tel: 604 594 4499

**Shoppers Drug Mart #2212**

8962 – 152nd Street Surrey, BC V3R 4E4

Tel: 604 581 4544

**Tri Cities**

Shoppers Drug Mart

3215 St. John’s Street

Port Moody, BC V3H 2E1

Tel: 604 461 4030

**Vancouver**

**Shoppers Drug Mart #272**

1125 Davie St

Vancouver, V6E 1N2

Tel: 604 669 2424

Fax: 604 681 2328

Open till midnight

**Shoppers Drug Mart #263**

885 West Broadway

Vancouver

Tel: 604 708 1135

Fax: 604 708 3304

Open till midnight

**Macdonalds Prescriptions Ltd**

Pharmacy and Lab

746 West Broadway

Vancouver

V5Z 1GB

Tel: 604 872 2662

Fax: 604 876 0242

**Locked Drug Boxes**

Although in general the use of the locked drug boxes for end of life care is recommended, in the current circumstances ordering these may create delay due to availability of significant quantities of drugs; the need for a homecare nurse to be present to open the drug box to access and administer the drugs. It is possible that homecare staffing levels may become considerably reduced, and constrained by the need to wear full personal protective equipment. In addition, the use of the locked drug boxes leads to significant drug wastage as the contents have to be disposed of once a patient has died. Therefore, it is appropriate at present to prescribe limited dispensing of individual drug prescriptions for patients which the carer can collect and administer. When necessary, the carer will need to be given instruction on how to administer subcutaneous injections and will need to be given supplies of syringes, needles, alcohol swabs and disposal boxes.

Here is a video about how to give a subcutaneous injection which can be shared with a patient’s carer; <https://www.youtube.com/watch?v=T4NWm7mqbHI>.

**Drugs Identified as Being in Short Supply**

There are many different sources for this information, including calling individual pharmacies, and the BC Pharmacare database. On-line resources include the BC Drug Shortages list: <https://www2.gov.bc.ca/gov/content/health/practitioner-professional-resources/pharmacare/pharmacies/drug-shortage-information> and the Drug Shortage Canada Database <https://www.drugshortagescanada.ca/?short=20>, however information on these databases does not concur, is not always up to date and doesn’t always reflect what is happening out in the community.

Drug selection and dosage can be determined by the individual prescriber. The following suggestions are for alternative options where appropriate and also suggesting appropriate prescribing for opioid naïve patients with COVID – 19 dying at home:

**Dexamethasone tabs** – injectable dexamethasone 4mg/ml is available, can be diluted in juice/chocolate milk and taken orally, or Prednisone or Prednisolone are suitable alternatives: Dexamethasone 4 mg = 25mg Prednisone or 20 mg of Prednisolone.

**Hydromorphone injection** – limited supply; injectable morphine is available instead.

**Kadian** Long acting Morphine -24 hours- limited supply; use q12h release instead, or Jurnista (24hr slow release hydromorphone).

**Midazolam** injection – limited supply; for agitation/sedation if Midazolam is not available, Lorazepam sublingual 1 mg is recommended. Methotrimeprazine may not be available.**Methotrimeprazine** injection – identified as short supply by Medical Pharmacies for Hospice and LTC. Haloperidol is a suitable alternative.

**Glycopyrrolate** injection – identified as short supply by Medical Pharmacies for Hospice and LTC; for secretions Scopolamine injection or patch, or Atropine eye drops (sublingual) suitable alternatives.

**Ranitidine** injection – limited supply

**Salbutamol** inhaler – limited supply, any other beta agonist. Avoid nebulizers during pandemic.

**COVID-19 Infection Crisis Medication Management**

In the event that we are called upon to look after COVID – 19 patients who may be dying at home from respiratory distress, it will be necessary to obtain drugs very quickly and it may not be easy to get homecare staff to visit in a timely manner. Carers will need a limited supply of drugs which they can use to relieve the dying person’s distress. It is likely that the dying person will NOT be opioid tolerant and will require very small doses of opioid and/or sedative medications.

It is expected that such patients will not live for many days and will die quickly, so **limited prescriptions with daily review** would be appropriate e.g. 10 doses of each drug. This would avoid wastage of drug supplies

Here is a suggested list of prescriptions for such patients which takes into consideration the possible drug shortages listed above. This advice is consistent with the BC COVOID-19 Symptom Management Guideline posted on the UBC Division of Palliative Care website <https://palliativecare.med.ubc.ca/coronavirus/>;

***ORAL ROUTE AVAILABLE***

***Morphine*** *tablets 5mg or liquid 1mg/ml, Rx 10 tabs or 50ml. Give half to one tablet, or 1-2 teaspoons (5-10ml) i.e. 2.5-5mg q1h prn* ***OR,*** *if patient is frail or has renal impairment,* ***Hydromorphone*** *tablets 1 mg or liquid 1mg/ml, Rx 10 tabs or 10ml. Give half to one tablet or 0.5-1.0ml i.e. 0.5 to 1 mg, q1h prn, for breathlessness and/or pain.*

*Note – tablets can be crushed and administered in a small amount of fluid or yoghurt/apple sauce sublingually for more rapid onset.*

***Lorazepam*** *1 mg sublingual tablets, 1-2 tablets sublingually q2h prn for agitation/distress or seizures.*

***Atropine*** *1% ophthalmic drops 1-2 drops sublingually q4h prn for prevention of secretions.*

***ORAL ROUTE NOT AVAILABLE***

***Morphine*** *injection 10mg/ml. Give2.5-5mg (0.25-0.5ml) subcut* ***OR,*** *if patient is frail or has renal impairment,* ***Hydromorphone*** *injection 2mg/ml, 0.25-0.5ml, ie. 0.5-1m,g subcut q 20 minute prn for shortness of breath.*

*If homecare nurse/doctor not present or unable to attend, close contact by phone is advised to review dosage, frequency, and need for further prescription.*

***Midazolam*** *injection if available) 2mg every 30 mins if needed for agitation/distress or seizures. If homecare nurse/doctor not present or unable to attend, close contact by phone is advised to review the dosage and frequency.*

***Glycopyrrolate*** *0.2mg/ml 1ml amps, 2ml (0.4mg) subcut q4h prn for prevention of secretions.*

*Note - Supply syringes, needles or butterfly needle insertion, alcohol swabs and sharps disposal box.*

*Advise competent carer to watch video on how to give subcutaneous injection if not able to demonstrate in person* <https://www.youtube.com/watch?v=T4NWm7mqbHI>*.*

*If frequent injections are expected to be needed, and a subcutaneous cannula is needed but there is no nurse to insert it, see* <https://www.youtube.com/watch?v=BpMUPQ21eEo> for a *demonstration. This will require telephone support and a spare cannula to practice with.*