Ontario Health

COVID-19 Supplemental Clinical Guidance for Patients with Chronic Kidney Disease

March 27, 2020

INTRODUCTION

Major planning directives related to the COVID-19 pandemic will be coordinated through Ontario Health, the Ministry of Health, and Ontario Public Health.

On March 9th, 2020, the Ontario Renal Network (ORN), a part of Ontario Health (Cancer Care Ontario) (OH-CCO) circulated the *Pandemic Planning Clinical Guideline for Patients with Chronic Kidney Disease*, which provides recommendations for a systematic approach in determining priority for consultation and treatment of patients with chronic kidney disease in Ontario during the time of a pandemic. It is intended to augment provincial, regional, and organizational pandemic planning by providing clinical guidance specific to chronic kidney disease care.

This document is intended as additional guidance specific to clinical care during the COVID-19 pandemic. Further updates may be released as the COVID-19 pandemic evolves and clinical evidence develops. The information provided herein is supplemental to that provided in sections of the Pandemic Planning Clinical Guideline and does not replace it.

PD Catheter Insertions

The Pandemic Planning Clinical Guideline section on Priority Classification indicates that "patients requiring a PD catheter that are required to start peritoneal dialysis within 48 hours" are classified as Priority A. Further, "patients requiring a PD catheter within 2 weeks in order to start peritoneal dialysis" are classified as Priority B.

Despite this classification, it is recognized that:

- Patients requiring an urgent peritoneal dialysis start usually can instead have a central venous catheter inserted and be initiated on hemodialysis.
- However, in a pandemic situation with infection risk and limited capacity and hemodialysis unit staff shortages, a PD start may be preferable for appropriate patients.
- Home dialysis allows patients to effectively self-isolate vs. travelling to and from the hemodialysis unit, typically three times per week, generating greater risk of exposure to infection and therefore transmission to and from the community during travel.
- Further, staff resources to support in-centre hemodialysis may become limited due to infection or precautionary self-isolation, making it very difficult to maintain adequate staffing for dialysis units.

Aggressive Testing (swabbing) for COVID-19 for In-Centre Hemodialysis Patients

In-centre hemodialysis units in Ontario should conduct COVID-19 testing (i.e., swabbing) proactively for in-centre hemodialysis patients. When they present with fever, shortness of breath, and/or upper respiratory symptoms, regardless of whether or not the symptoms are new onset, COVID-19 swabs should be ordered and be made available. Further, testing should be ordered by staff nephrologists to ensure guidelines are followed.

The following factors support this approach:

- **Dialysis patients commonly have baseline symptoms consistent with COVID-19 and therefore may be COVID-19 positive and go undetected.** Like the Long-Term Care resident population, the in-centre hemodialysis patient population is likely to be older, frailer, and have complex chronic conditions. Many patients may have chronic conditions and present with baseline symptoms of upper respiratory infections, including fever, cough, and/or shortness of breath, or other symptoms similar to those of COVID-19. In light of increased community spread, testing in-centre hemodialysis patients who presents with these symptoms would be warranted.
- **In-centre hemodialysis patients, of necessity, are moving around in the community:** They are transported to and from in-centre units in a variety of ways, with a high proportion (approximately 70%, or over 6,000 patients) relying on some form of public transit or other transportation service, thereby risking transmission to or from the community when travelling to and from their treatments.
- **If dialysis patients contract COVID-19, the impact on specialized healthcare providers is disastrous:** Three COVID-19 positive dialysis patients in Ontario in mid-March led to the self-isolation of a total of ~45 healthcare workers at three different hospitals. If identification and confirmation of COVID-19 is not timely, the patient may transmit the virus to others (patients and staff) during multiple treatments. Staff who deliver hemodialysis are specially trained and tend not to be interchangeable with other nursing staff. Hemodialysis units will be significantly challenged in providing safe care to patients with minimal specialized staff available.
- **If dialysis patients contract COVID-19, they get seriously ill and use a large amount of hospital resources:** Because in-centre hemodialysis patients tend to be older, frailer and have complex chronic conditions, they are at a high risk of severe disease if they contract COVID-19 and will therefore require a significant amount of healthcare services, including inpatient capacity, and likely intensive care resources, including ventilators and acute dialysis machines/supplies.
- **In centre hemodialysis staff frequently work in more than one hospital:** The loss of such staff from the workforce because of contact with suspected or confirmed COVID-19 cases can reduce the workforce in multiple hospital units with implications for the capacity of those units to deliver dialysis.

Reducing Dialysis Time

- Where it is safe for the patient, dialysis treatments may be reduced from a typical frequency of three times per week to a lower frequency on account of staff shortages of hemodialysis trained nurses in RRPs and/or to reduce infection exposure risk for patients.
- An assessment is required for each individual patient; RRPs may consider doing these assessments ahead of time for preparation.