

Memorandum

SUBJECT: CorHealth COVID-19 Cardiac Memo #1 – **RECOMMENDATIONS FOR AN ONTARIO APPROACH TO MANAGING CARDIAC ELECTROPHYSIOLOGY DURING COVID-19**

TO: Cardiac Hospital Administrators, Cardiac Program Medical Directors, Electrophysiology Medical Directors, Cardiac Leadership Council, Members of the Clinical Advisory Committee

FROM: Office of the CEO, CorHealth Ontario

DATE: March 24, 2020

TIME: 3:00 PM

VERSION: 1

DISCLAIMER: The information in this document represents general guidance based on current practice and available evidence. The document was developed by provincial clinical experts, reflecting best knowledge at the time of writing, and is subject to revision based on changing circumstances and conditions. This information is intended to be “guidance rather than directive,” and is not meant to replace clinical judgment.

Recommendations for an Ontario Approach to Managing Cardiac Electrophysiology during COVID-19

PREAMBLE

The Ministry of Health has requested that all hospitals ramp down non-essential services, elective surgeries and other non-emergent clinical activity. CorHealth Ontario has been engaging with cardiac experts and stakeholders across the province to discuss how best to preserve health care capacity, in light of increasing COVID-19 cases requiring health care. The following guidance and recommendations reflect advice from this engagement.

GUIDING PRINCIPLES

1. Minimize impact of COVID-19 on known mortality/morbidity of the cardiac patient population.
2. Limit and/or redeploy use of hospital resources in preparation of surge (i.e. health care human resources, personal protective equipment, procedure rooms, Intensive Care Units, Emergency Departments).
3. Protection of health care workers and patients.

RECOMMENDATIONS

1. Electrophysiology/Ablation Procedures:
 - a. Hospitals performing cardiac electrophysiology procedures should consider deferring all electrophysiology procedures, **with the exception of urgent procedures**. Urgent procedures include:
 - i. Atrial fibrillation (AF) with ventricular pre-excitation
 - ii. Ventricular tachycardia (VT) in implantable cardioverter defibrillator (ICD) patients presenting with shocks and/or sustained, unstable VT
 - iii. AF/ atrial flutter (AFL) (including atrioventricular (AV) nodal ablation) for a patient with rapidly declining heart failure (HF), particularly with a low ejection fraction, or requiring hospitalization
 - b. Regular triage by electrophysiology staff and/or designates to ensure patients are informed and deferred cases are reviewed regularly and as appropriate

2. Implantation of Pacemakers (PPMs) and Cardiac Resynchronization Therapy PPMs (CRT-P):
 - a. Hospitals performing PPM implants should consider deferring all procedures, **with the exception of urgent procedures**. These would include:
 - i. PPMs for complete heart block, high degree AV block, bradycardia causing syncope, bradycardia causing hospitalization
 - ii. CRT-P for patients with frequent hospitalization or frequent Emergency Room (ER) visits for HF
 - iii. Pack changes for patients with battery less than 3 months, prioritizing those who are pacing dependent or dependent on CRT for preventing decompensated HF
 - b. Regular triage by electrophysiology staff and/or designates to ensure patients are informed and deferred cases are reviewed regularly and as appropriate
3. Implantation of Implantable Cardioverter Defibrillators (ICDs) and CRT ICDs (CRT-D):
 - a. Hospitals performing PPM implants should consider deferring all procedures, **with the exception of urgent procedures**. These would include:
 - i. Implantation of ICDs for secondary prevention or urgent pacing
 - ii. Implantation of ICDs for primary prevention should proceed only in high risk cases. These would include CRT ICDs, patients with frequent non-sustained VT or frequent ventricular ectopy, and patients with high risk genetic and/or inherited conditions
 - iii. Pack changes for patients with battery less than 3 months, prioritizing those who are pacing dependent, use their ICD for VT/ventricular fibrillation (VF) therapies, or who are dependent on CRT for preventing decompensated HF
 - b. Decision-making around selection of primary prevention ICD patient cases to be done should incorporate a shared decision-making approach, inclusive of patient and caregiver perspectives.
4. Electrophysiology (EP) health human resources:
 - a. With reduced EP activity, hospitals should review their EP and Implant schedules and human resources, and may consider the following:
 - i. Physicians scheduled for activity on a given day (EP or implant) remain available in case urgent cases arise
 - ii. If an urgent case arises, the decision to open a room for activity should be decided in conjunction with the team (e.g. triage office, Heart Rhythm Team leadership)
5. Device Clinics:
 - a. Hospitals should consider scaling back device clinic activity and defer all routine device follow-ups.
 - b. Immediate (1-4 week) post-operative appointments should continue for wound checks and acute device problems (lead dislodgement, etc.).
 - c. Visits for urgent issues such as shocks, VT therapy, battery depletion, and/or device alerts/failures should continue.
 - d. Hospitals should consider remote monitoring options where possible, for routine or other non-urgent interrogations.

6. Cardioversion Services:

- a. Cardioversion services should continue to avoid pressure on ER or other urgent care areas for performing this service – prioritization should be given to hospitalized patients or those at risk of ER visit.
- b. Patients who are minimally symptomatic and do not have high heart rates should be deferred on a case by case basis.
- c. Consideration should be given that these procedures often require anesthesia support and there is a risk (albeit minimal) of the procedure requiring intubation and becoming aerosolized. Therefore, appropriate location in an isolated area with availability of personal protective equipment is recommended.
- d. Transesophageal Echocardiogram (TEE) guided cardioversion would be a high-risk aerosolized procedure and requires appropriate isolation and personal protective equipment for health care workers.