

Tachydysrhythmia Medical Directive

An Advanced Care Paramedic may provide the treatment prescribed in this Medical Directive if authorized.

Indications

Symptomatic Tachydysrhythmia.

Conditions

Valsalva Maneuver		adenosine	
Age	≥ 18 years	Age	≥ 18 years
LOA	Unaltered	LOA	Unaltered
HR	≥ 150 bpm	HR	≥ 150 bpm
RR	N/A	RR	N/A
SBP	Normotension	SBP	Normotension
Other	Narrow complex and regular rhythm	Other	Narrow complex and regular rhythm

amiodarone		lidocaine	
Age	≥ 18 years	Age	≥ 18 years
LOA	Unaltered	LOA	Unaltered
HR	≥ 120 bpm	HR	≥ 120 bpm
RR	N/A	RR	N/A
SBP	Normotension	SBP	Normotension
Other	Wide complex and regular rhythm	Other	Wide complex and regular rhythm

Synchronized Cardioversion	
Age	≥ 18 years
LOA	N/A
HR	≥ 120 bpm (wide) OR ≥ 150 bpm (narrow)
RR	N/A
SBP	Hypotension
Other	Altered mental status, ongoing chest pain, other signs of shock

Contraindications

Valsalva Maneuver	adenosine
Sinus tachycardia or atrial fibrillation or atrial flutter	Allergy or sensitivity to adenosine
	Sinus tachycardia or atrial fibrillation or atrial flutter
amiodarone	Patient taking dipyridamole or carbamazepine
Allergy or sensitivity to amiodarone	Bronchoconstriction on exam
lidocaine	
Allergy or sensitivity to lidocaine	
Synchronized Cardioversion	
N/A	

Treatment

Consider rhythm determination (confirm regularity)

Consider 12-lead ECG acquisition and interpretation to confirm QRS width (if this won't delay therapy)

Consider modified valsalva maneuver

Perform a maximum of 2 attempts lasting 10 to 20 seconds duration each.

Consider adenosine

	Route
	IV
Initial dose	6 mg
Subsequent dose	12 mg
Dosing interval	2 min
Max. # of doses	2

Mandatory Provincial Patch Point

Patch to BHP for authorization to proceed with amiodarone or lidocaine or if monomorphic wide complex regular rhythm for adenosine.

Consider amiodarone OR lidocaine (if not using amiodarone)

	Medication amiodarone	Medication lidocaine
	Route IV*	Route IV
Initial dose	150 mg	1.5 mg/kg
Subsequent dose	150 mg	0.75 mg/kg
Max. single dose	150 mg	150 mg
Dosing interval	10 min	10 min
Max. # of doses	2	3

* Amiodarone should be administered by IV infusion over 10 min.

Mandatory Provincial Patch Point

Patch to BHP for authorization to proceed with synchronized cardioversion.

Consider synchronized cardioversion

Administer up to 3 synchronized shocks in accordance with BHP direction and energy settings. (In the setting of a patch failure, the energy settings to be used are 100 J, 200 J and the maximum manufacturer setting.)

Clinical Considerations

N/A

Considerations for Treat and Discharge (if authorized)

The patient must meet all of the following criteria:

- ☐ the patient is ≥ 18 AND < 65 years old;
- ☐ patient must have a prior history of SVT;
- ☐ the patient presented with narrow complex and regular rhythm Supraventricular Tachycardia (SVT);
- ☐ the patient must have only had a single SVT episode in the past 24 hours
- ☐ the patient has returned to normal sinus rhythm (NSR) either spontaneously, with a valsalva maneuver or with adenosine treatment by paramedics and is now asymptomatic;
- ☐ the patient has returned to their normal level of consciousness;
- ☐ a complete set of vital signs are within expected normal ranges with a HR < 100 bpm and the patient remains in NSR for at least 15 minutes post conversion;

AND

- ☐ the patient was not treated with electrical cardioversion by paramedics;
- ☐ the patient is not pregnant;
- ☐ the SVT must not be related to alcohol or substance abuse or withdrawal, and;
- ☐ the patient has no fever or preceding illness.

In addition to the above criteria, if all of the following requirements have been met, the patient can be discharged by paramedics:

- ☐ a responsible adult agrees to remain with the patient for the next 4 hours;
- ☐ all of the patient or substitute decision makers questions were answered and a care plan was developed;
- ☐ the patient or substitute decision maker has been advised to follow up with their primary health care team or provider;
- ☐ clear instructions to call 911 were provided should symptoms redevelop;
- ☐ patient or substitute decision maker has the ability to access 911 should symptoms redevelop, and;
- ☐ patient or substitute decision maker consents to the discharge.

Clinical Considerations (Treat and Discharge)

Patch to BHP for consultation if you are unclear if the patient meets all of the discharge criteria.