

Southern Illinois Regional EMS System

CC-7 TACHYCARDIA ALGORITHM

ALS/ILS

- Patient Assessment and Initial Care protocol
 - Identify rhythm and rate
 - 12 lead ECG (if applicable)
 - Notify Medical Control

- Stable Atrial Fibrillation or Atrial Flutter
 - Notify Medical Control
 - Supportive care
 - Transport ASAP

- Stable Narrow Complex Tachycardia:
 - Valsalva maneuver
 - If vagal maneuvers are unsuccessful:
 - **Adenosine 6mg** IV/IO push over 1-3 seconds
 - Rapid push with rapid saline flush
 - If initial dose unsuccessful
 - **Adenosine 12mg** IV/IO push over 1-3 seconds
 - Rapid push with rapid saline flush
 - May repeat **Adenosine 12mg** *once* in 1-2 minutes.
 - If unsuccessful, look for underlying rhythm after Adenosine administration.
 - Treat per appropriate protocol
 - Transport ASAP

- UNSTABLE/SYMPTOMATIC Narrow Complex Tachycardia (Ventricular HR > 160, chest pain, signs of shock, altered level of consciousness, systolic pressure <90mm/Hg).
 - Consider Adenosine if tachyarrhythmia is regular and narrow complex.
 - Prepare for Synchronized Cardioversion.
 - Consider sedation (if time allows) while preparing for cardioversion.
 - **Diazepam 2mg – 5mg** IV/IO/IM/Rectal
 - **Lorazepam 1mg – 2mg** IV/IO/IM/Rectal
 - Perform synchronized cardioversion at 50-100 joules monophasic or biphasic equivalent.
 - If synchronized cardioversion attempt is unsuccessful:
 - Increase energy to appropriate joule level.
 - Cardioversion sequence is 100 J, 200 J, 300 J, and 360 J monophasic or biphasic equivalent.
 - Continue procedure using the above sequence until successful conversion to a perfusing rhythm.
 - Transport ASAP

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- Stable Monomorphic Wide Complex Tachycardia:
 - Consult Medical Control
 - Consider **Amiodarone 150mg** IV/IO over 10 minutes.
 - Can repeat per Medical Control up to max dose of 2.2g in 24 hour period.
 - Transport ASAP
 - Rhythm unchanged – Consider SVT with aberrancy
 - Consider **Adenosine 6mg** IV/IO push.
 - 2 additional doses of **Adenosine 12mg** can be administered.
 - Rhythm change – follow appropriate protocol.

- UNSTABLE/SYMPTOMATIC Wide Complex Tachycardia (Ventricular HR > 160, chest pain, signs of shock, altered level of consciousness, systolic pressure <90mm/Hg).
 - Prepare for Synchronized Cardioversion.
 - You can consider appropriate medication while preparing for cardioversion.
 - **Diazepam 2mg – 5mg** IV/IO/IM/Rectal
 - **Lorazepam 1mg – 2mg** IV/IO/IM/Rectal
 - Perform synchronized cardioversion at 100 joules (100 J) monophasic or biphasic equivalent.
 - If synchronized cardioversion attempt is unsuccessful:
 - Increase energy to appropriate joule level.
 - Cardioversion sequence is 100 J, 200 J, 300 J, and 360 J monophasic or biphasic equivalent.
 - Continue procedure using the above sequence until successful conversion to a perfusing rhythm.
 - Transport ASAP

- Note:
 - (ALS) Consider Magnesium for Torsades des Pointes
 - Consult Medical Control.
 - **Magnesium 1-2 grams** over 5-10 minutes.