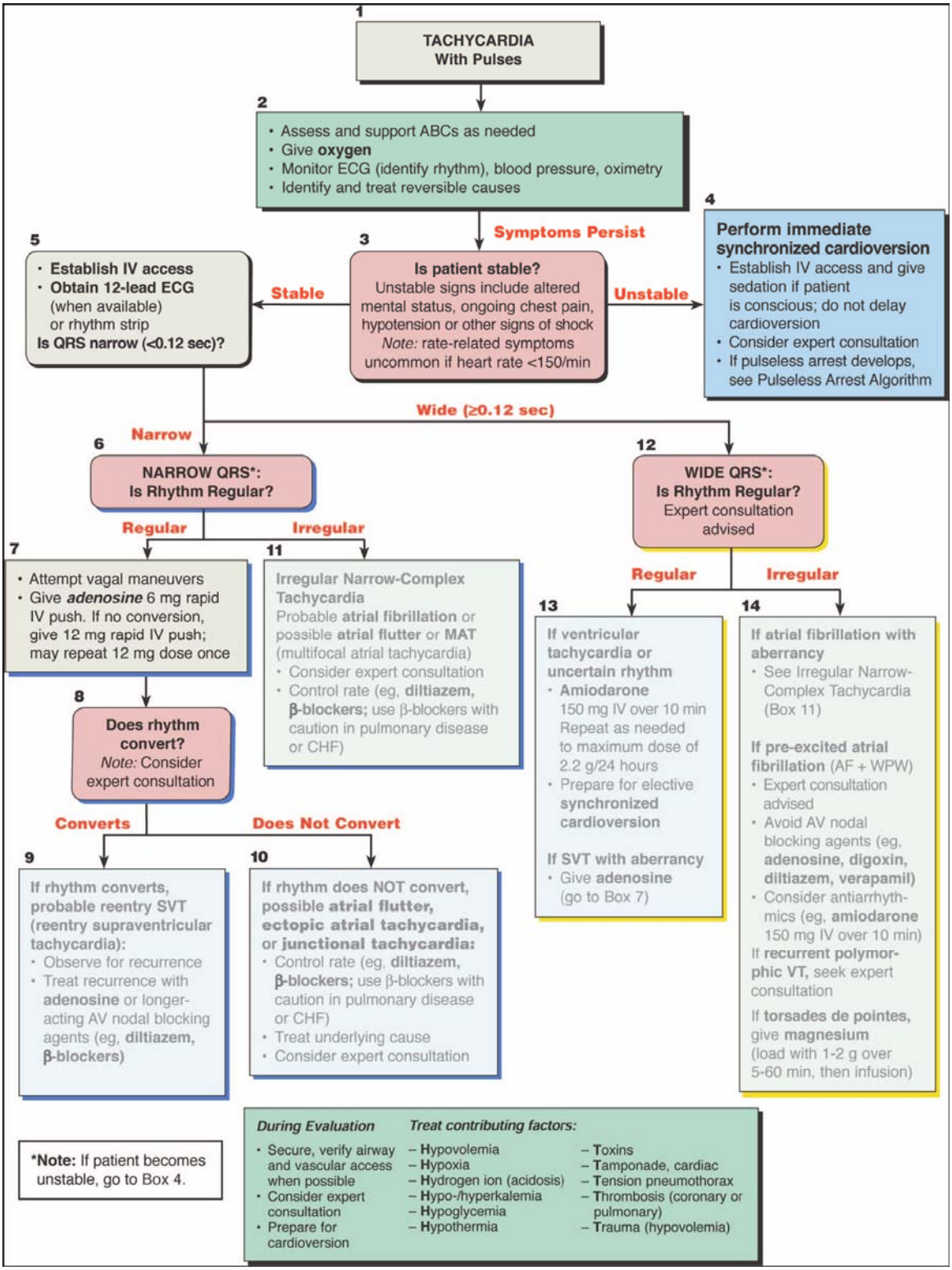
1
TACHYCARDIA
With Pulses
2
• Assess and support ABCs as needed
• Give oxygen
• Monitor ECG (identify rhythm), blood pressure, oximetry
• Identify and treat reversible causes
Symptoms Persist
3
Is patient stable?
Unstable signs include altered mental status, ongoing chest pain, hypotension or other signs of shock
Note: rate-related symptoms uncommon if heart rate <150/min
Stable
Unstable
4
Perform immediate synchronized cardioversion
• Establish IV access and give sedation if patient is conscious; do not delay cardioversion
• Consider expert consultation
• If pulseless arrest develops, see Pulseless Arrest Algorithm
5
• Establish IV access
• Obtain 12-lead ECG (when available) or rhythm strip
Is QRS narrow (<0.12 sec)?
Narrow
Wide (≥0.12 sec)
6
NARROW QRS*:
Is Rhythm Regular?
Regular
Irregular
7
• Attempt vagal maneuvers
• Give adenosine 6 mg rapid IV push. If no conversion, give 12 mg rapid IV push; may repeat 12 mg dose once
8
Does rhythm convert?
Note: Consider expert consultation
Converts
Does Not Convert
9
If rhythm converts, probable reentry SVT (reentry supraventricular tachycardia):
• Observe for recurrence
• Treat recurrence with adenosine or longer-acting AV nodal blocking agents (eg, diltiazem, β-blockers)
10
If rhythm does NOT convert, possible atrial flutter, ectopic atrial tachycardia, or junctional tachycardia:
• Control rate (eg, diltiazem, β-blockers; use β-blockers with caution in pulmonary disease or CHF)
• Treat underlying cause
• Consider expert consultation
11
Irregular Narrow-Complex Tachycardia
Probable atrial fibrillation or possible atrial flutter or MAT (multifocal atrial tachycardia)
• Consider expert consultation
• Control rate (eg, diltiazem, β-blockers; use β-blockers with caution in pulmonary disease or CHF)
12
WIDE QRS*:
Is Rhythm Regular?
Expert consultation advised
Regular
Irregular
13
If ventricular tachycardia or uncertain rhythm
• Amiodarone 150 mg IV over 10 min Repeat as needed to maximum dose of 2.2 g/24 hours
• Prepare for elective synchronized cardioversion
If SVT with aberrancy
• Give adenosine (go to Box 7)
14
If atrial fibrillation with aberrancy
• See Irregular Narrow-Complex Tachycardia (Box 11)
If pre-excited atrial fibrillation (AF + WPW)
• Expert consultation advised
• Avoid AV nodal blocking agents (eg, adenosine, digoxin, diltiazem, verapamil)
• Consider antiarrhythmics (eg, amiodarone 150 mg IV over 10 min)
If recurrent polymorphic VT, seek expert consultation
If torsades de pointes, give magnesium (load with 1-2 g over 5-60 min, then infusion)
*Note: If patient becomes unstable, go to Box 4.
During Evaluation
• Secure, verify airway and vascular access when possible
• Consider expert consultation
• Prepare for cardioversion
Treat contributing factors:
– Hypovolemia
– Hypoxia
– Hydrogen ion (acidosis)
– Hypo-/hyperkalemia
– Hypoglycemia
– Hypothermia
– Toxins
– Tamponade, cardiac
– Tension pneumothorax
– Thrombosis (coronary or pulmonary)
– Trauma (hypovolemia)