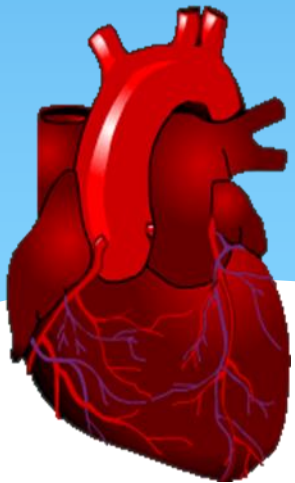


تازه های مراقبت پرستاری از بیمار مبتلا به اورژانس های قلبی

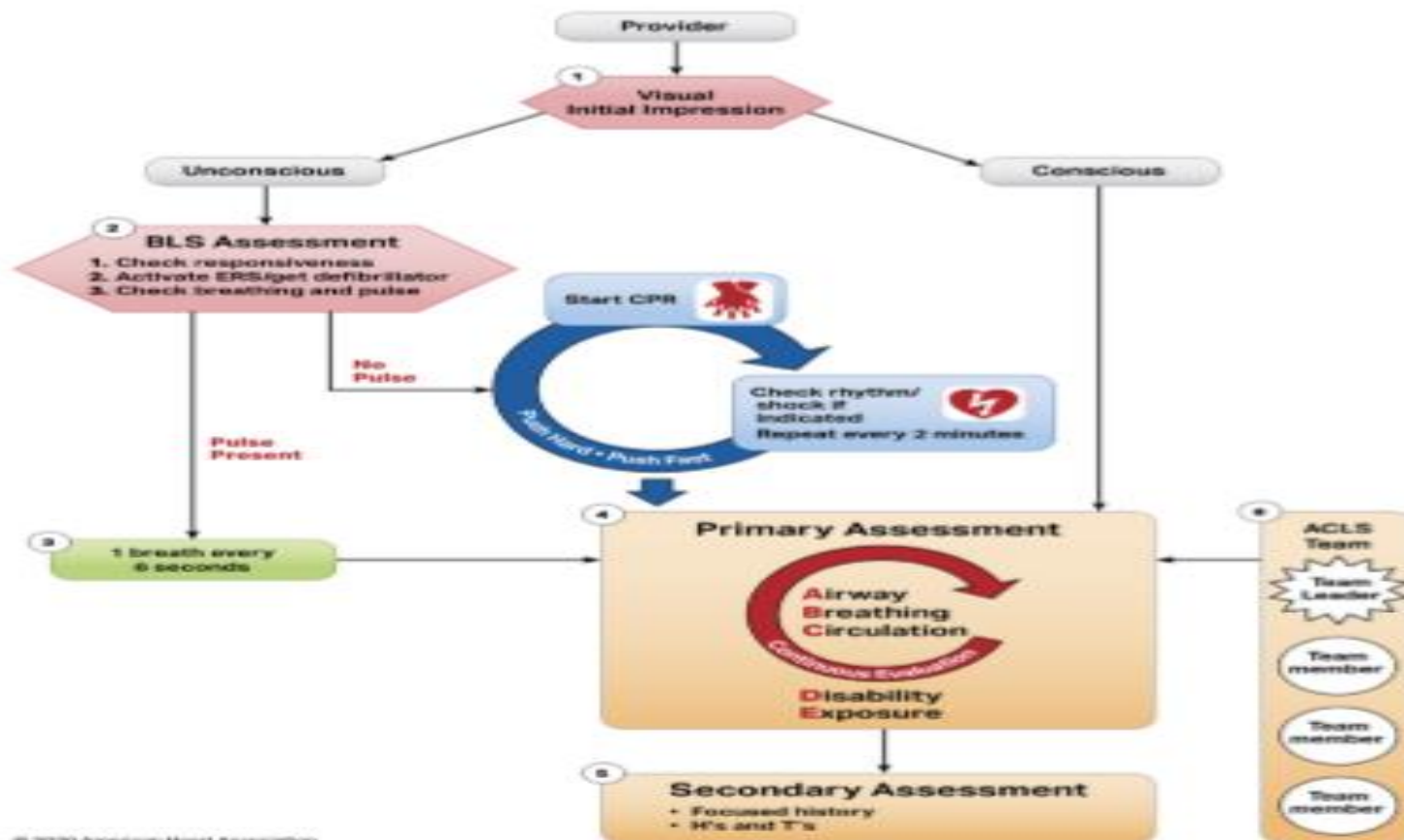


معصومه باقری کودکانی

7 مهر 1400

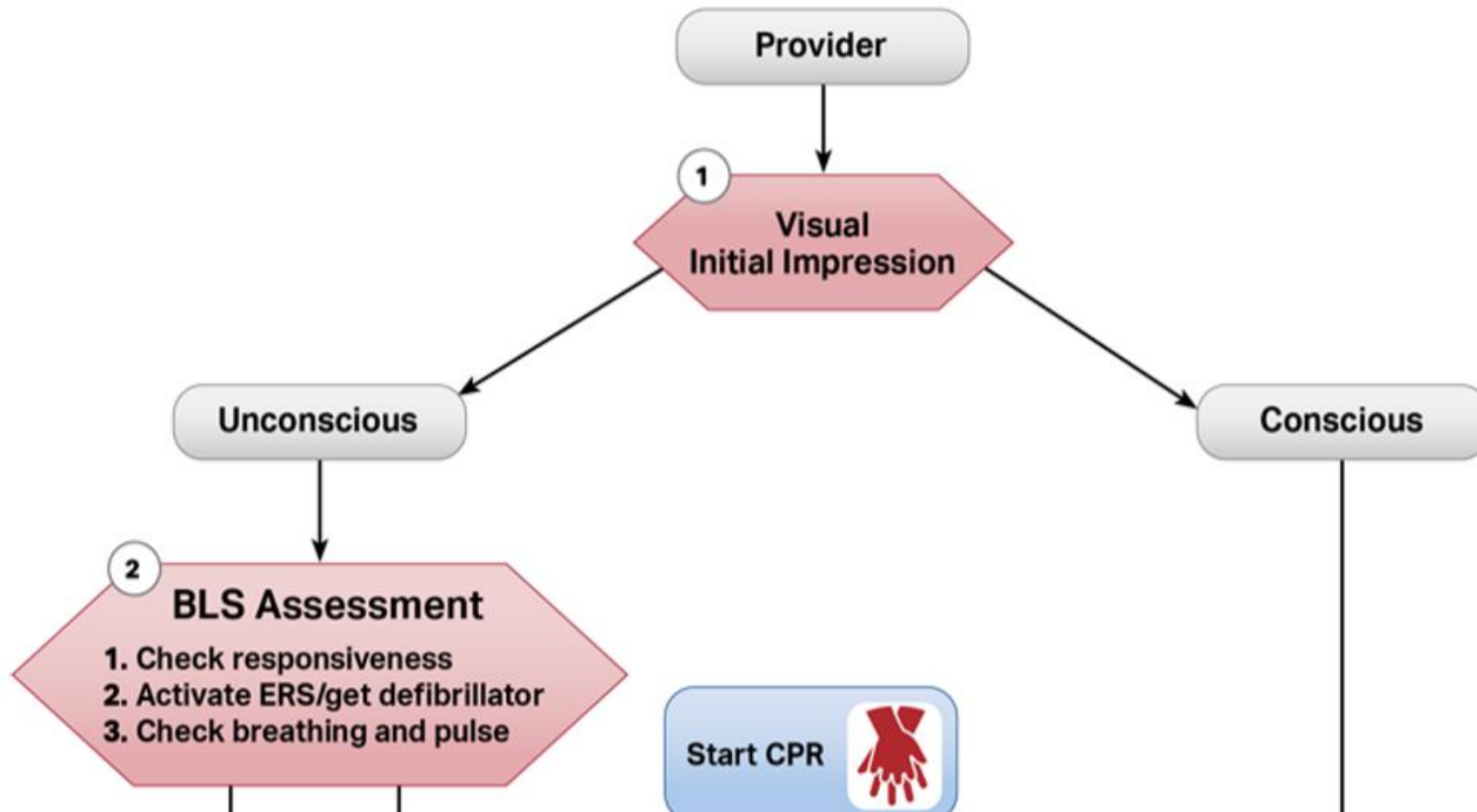
Systematic Approach

Expanded Systematic Approach Algorithm

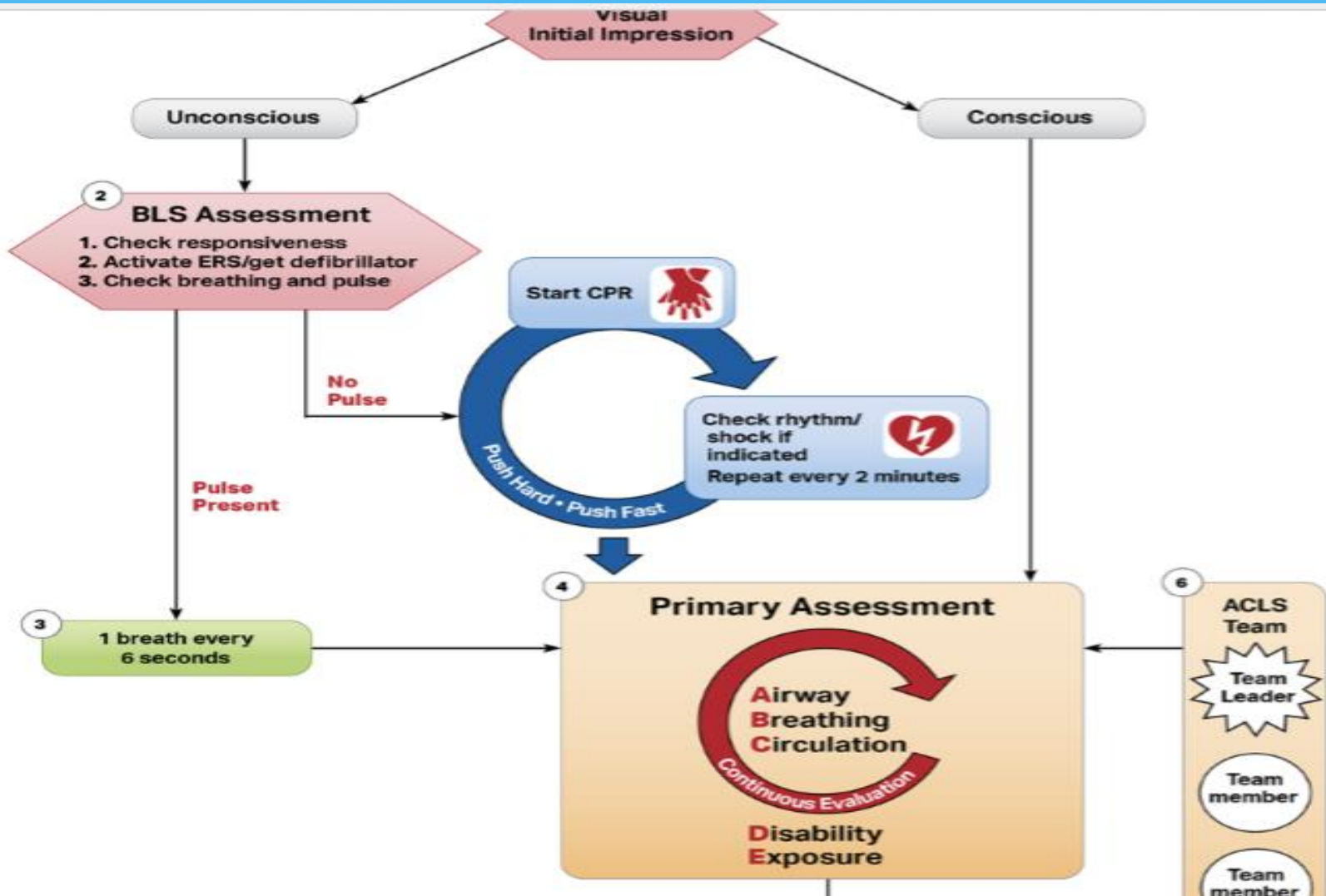


Systematic Approach

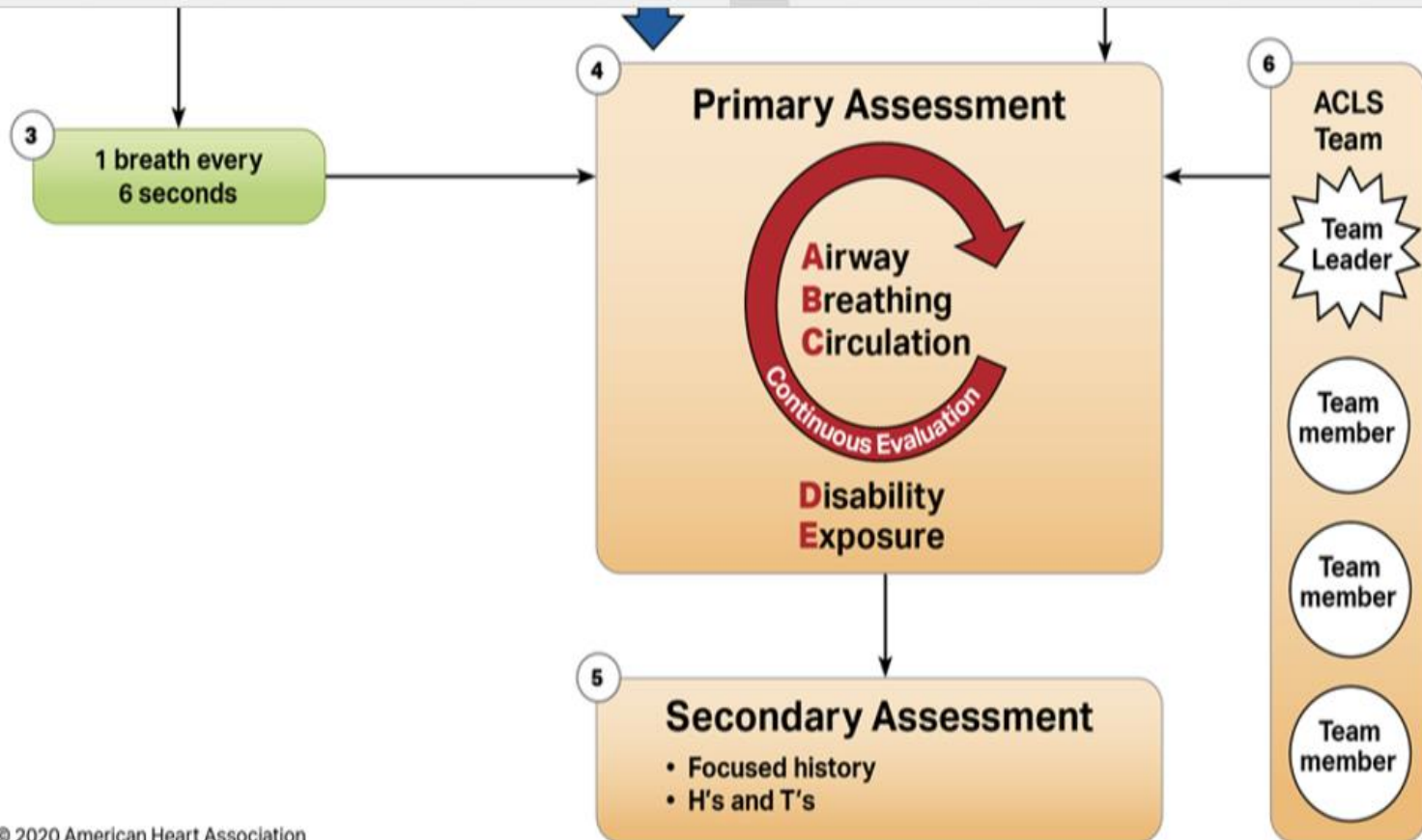
Expanded Systematic Approach Algorithm



Systematic Approach



Systematic Approach





The actions used are guided by the following systematic approaches:

BLS Assessment

Primary Assessment (A, B, C, D, and E) Secondary

Assessment (SAMPLE, H's and T's)

Primary Assessment

Airway
Breathing
Circulation
Disability
Exposure

The Primary Assessment

Airways Is the airway patent? Is an advanced airway indicated? Is proper placement of airway device confirmed? Is tube secured and placement reconfirmed frequently?

Breathing Are ventilation and oxygenation adequate? Are quantitative waveform capnography and oxyhemoglobin saturation monitored?

Circulation Are chest compressions effective? What is the cardiac rhythm? Is defibrillation or cardioversion indicated? Has IV/IO access been established? Is ROSC present? Is the patient with a pulse unstable? Are medications needed for rhythm or blood pressure? Does the patient need volume (fluid) for resuscitation?

Disability Check for neurologic function Quickly assess for responsiveness, level of consciousness, and pupil dilatation AVPU: Alert, Voice, Painful, Unresponsive

Exposure Remove clothing to perform a physical examination, looking for obvious signs of trauma, bleeding, burns, unusual markings, or medical alert bracelets

The Secondary Assessment

SAMPLE

Signs and symptoms

Allergies

Medications (including the last dose taken)

Past medical history (especially relating the to the current illness)

Last meal

Events

The Most Common Causes of Cardiac Arrest As Well As
Emergency Cardiopulmonary Conditions (H's And T's).

Secondary Assessment

نشانه ها و علائم بیمار

Signs and symptoms

هرگونه حساسیت دارویی و غذایی بیمار

Allergies

دارو های مورد استفاده بیمار

Medications

تاریخچه پزشکی بیمار

Past medical history

آخرین وعده غذایی

Last meal

انفصال که متجر به رخداد اخیر شده است

Events

H's and T's

کمبود حجم خون در گردش

Hypovolemia

نرسیدن اکسیژن کافی به اندام

Hypoxia

تجمع اسید در خون و بافت های بدن

Hydrogen ion (acidosis)

غلظت بالای پتاسیم در خون

Hyperkalemia

کمبود پتاسیم خون

Hypokalemia

افت دمای بدن

Hypothermia

H's and T's

تجمع غیر طبیعی هوا در فضای جنب

Tension pneumothorax

تجمع مایع بین قلب و پریمکارد

Cardiac Tamponade

مسمومیت ها

Toxins

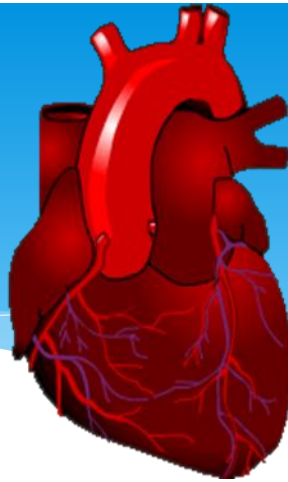
حرکت نخسته به سمت شریان های ریه و
انسداد آن

Pulmonary Thrombosis

انسداد شریان های کرونری

Coronary Thrombosis

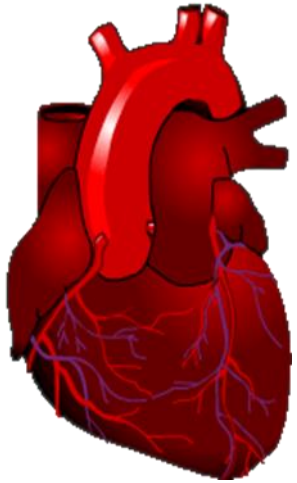
- * you are working on the telemetry unit. You have just received a patient from the emergency department who presented with syncope of unknown cause. They were unable to discover the cause in the emergency department and the decision was made that she be admitted for additional diagnostics and observation. You just finished her initial assessment, which was unremarkable, and left her room to begin catching up on your charting. The monitor technician hands you the following strip.



Bradycardia is defined as

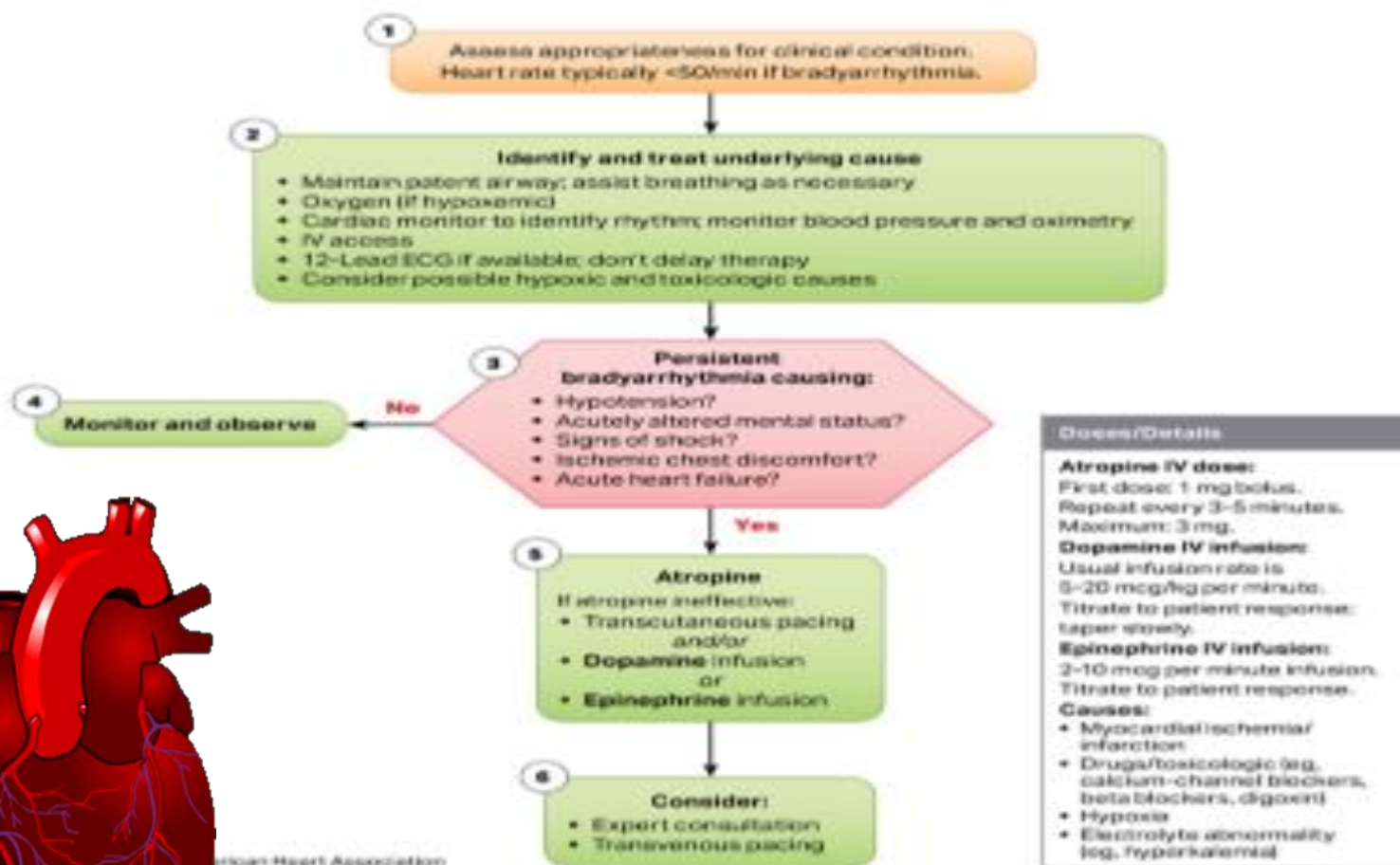
- * A heart rate of <60 beats per minute.
- * When bradycardia is the cause of symptoms, the rate is generally <50 beats per minute, which is the working definition of bradycardia used here.

Bradycardia Algorithm focuses on

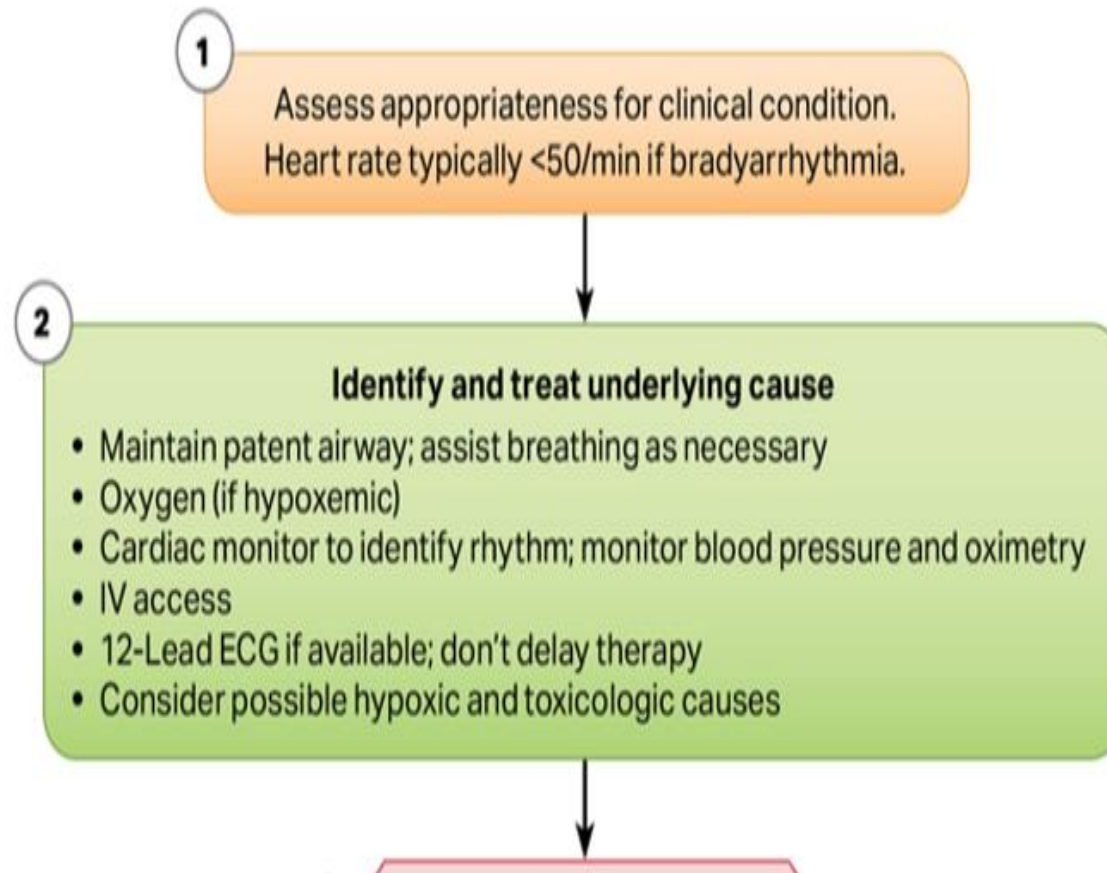


Management of
clinically significant bradycardia.

Adult Bradycardia Algorithm

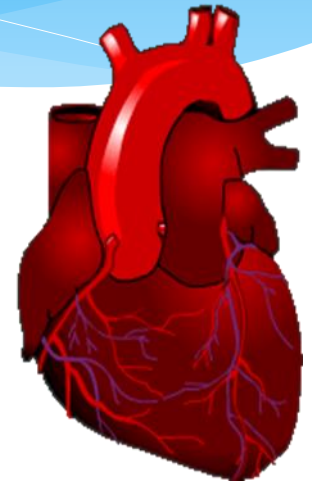


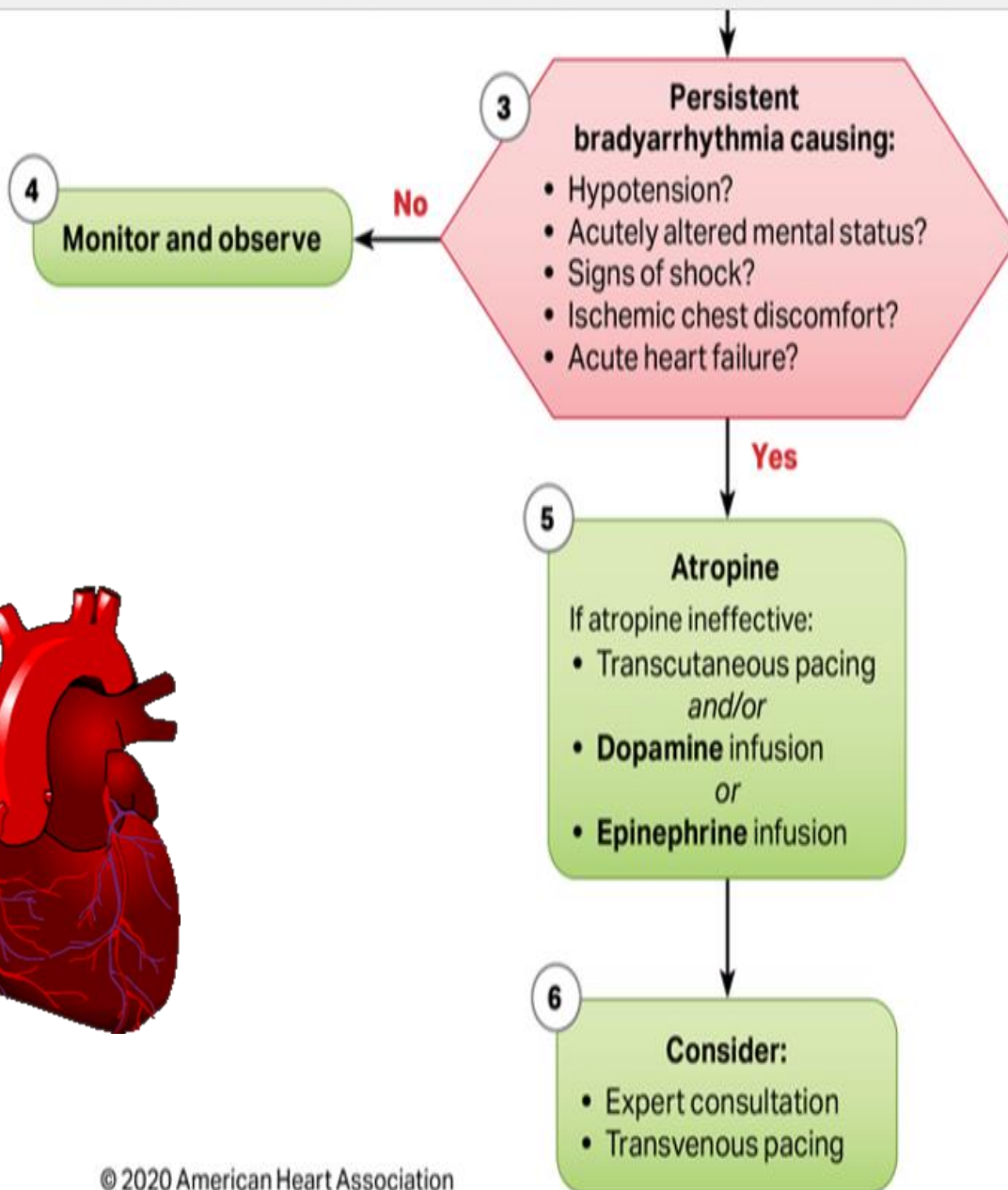
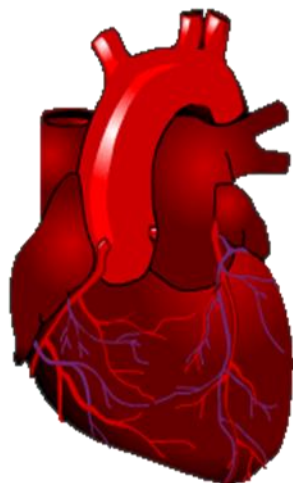
Adult Bradycardia Algorithm



If the bradycardia

- * Is suspected to be the cause of:
 - * Acute altered mental status
 - * Ischemic chest discomfort
 - * Acute heart failure
 - * Hypotension
 - * Or other signs of shock
- * The patient should receive immediate treatment





Doses/Details

Atropine IV dose:

First dose: 1 mg bolus.
Repeat every 3-5 minutes.
Maximum: 3 mg.

Dopamine IV infusion:

Usual infusion rate is
5-20 mcg/kg per minute.
Titrate to patient response;
taper slowly.

Epinephrine IV infusion:

2-10 mcg per minute infusion.
Titrate to patient response.

Causes:

- Myocardial ischemia/infarction
- Drugs/toxicologic (eg, calcium-channel blockers, beta blockers, digoxin)
- Hypoxia
- Electrolyte abnormality (eg, hyperkalemia)

Doses/Details

Atropine IV dose:

First dose: 1 mg bolus.

Repeat every 3-5 minutes.

Maximum: 3 mg.

Dopamine IV infusion:

Usual infusion rate is

5-20 mcg/kg per minute.

Titrate to patient response;
taper slowly.

Epinephrine IV infusion:

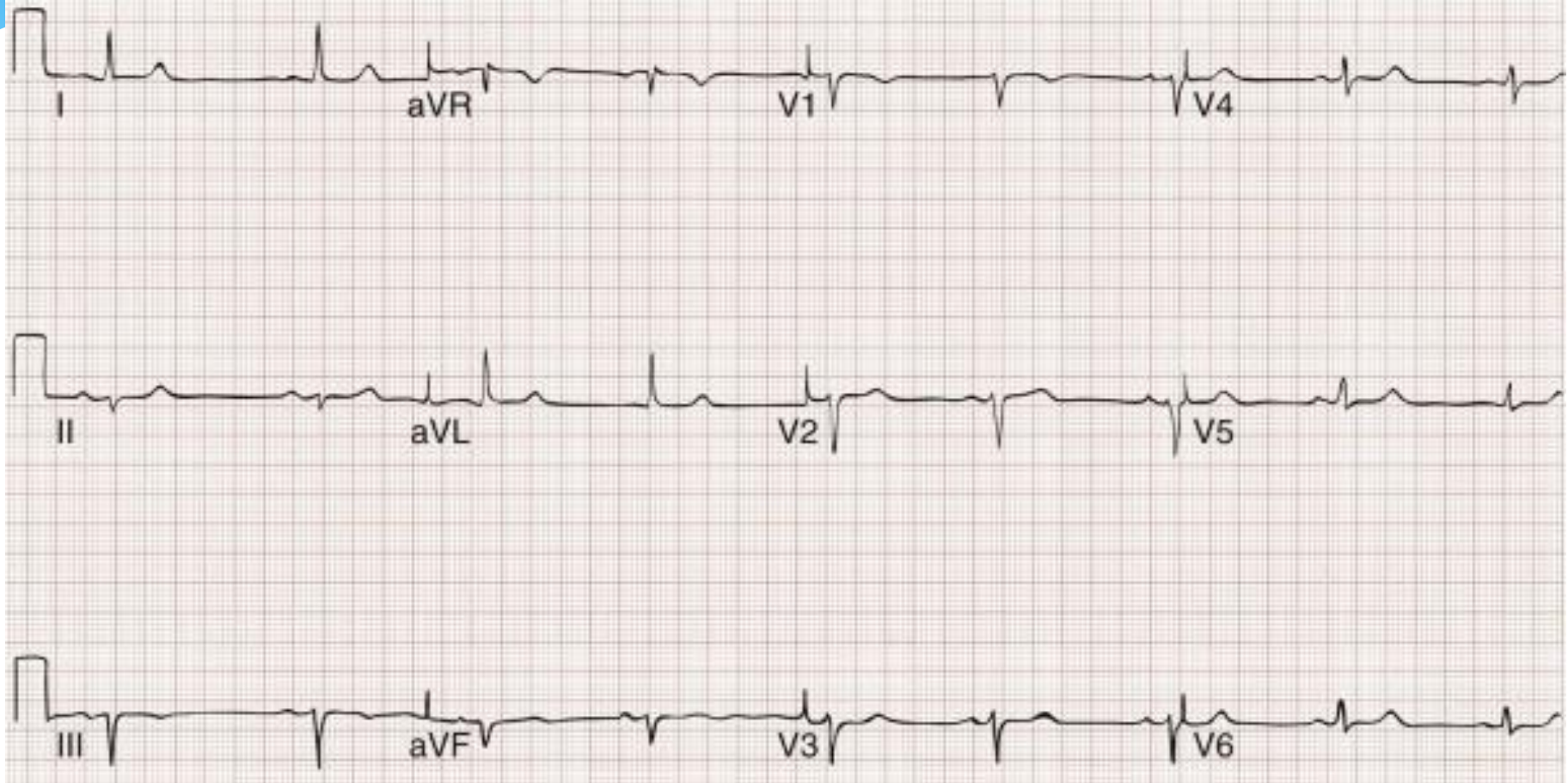
2-10 mcg per minute infusion.

Titrate to patient response.

Causes:

- Myocardial ischemia/infarction
- Drugs/toxicologic (eg, calcium-channel blockers, beta blockers, digoxin)
- Hypoxia
- Electrolyte abnormality (eg, hyperkalemia)

Sinus Bradycardia:



Atrioventricular (AV) blocks:

- *Are classified as:

- *First

- *Second

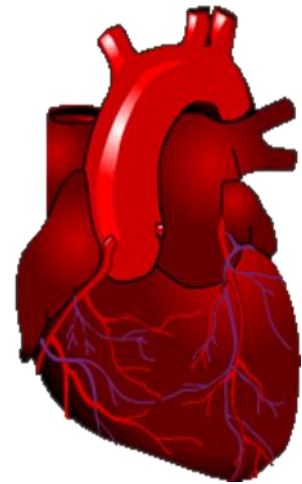
- * Third-degree

- *Blocks may be caused by :

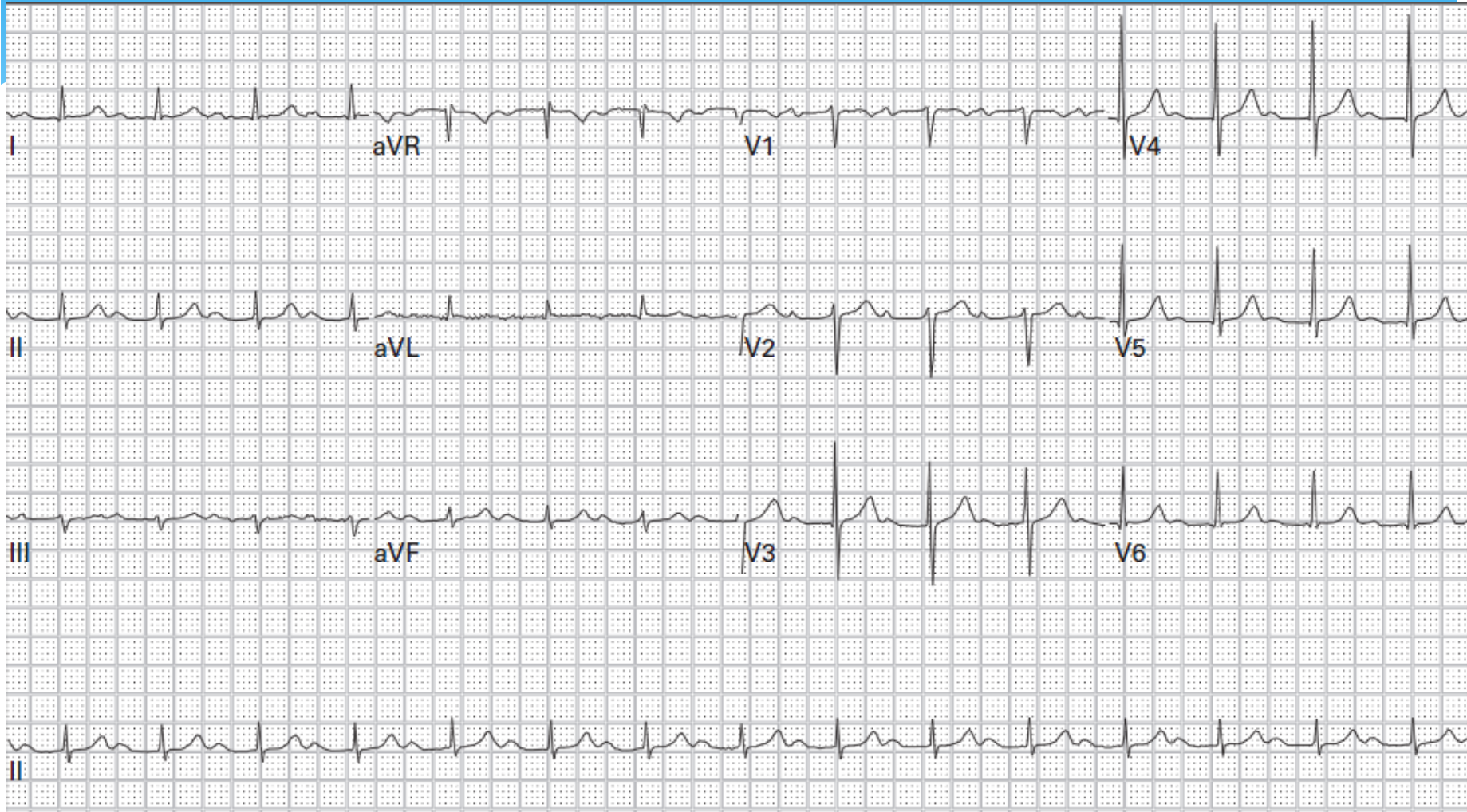
- *Medications

- *Electrolyte disturbances

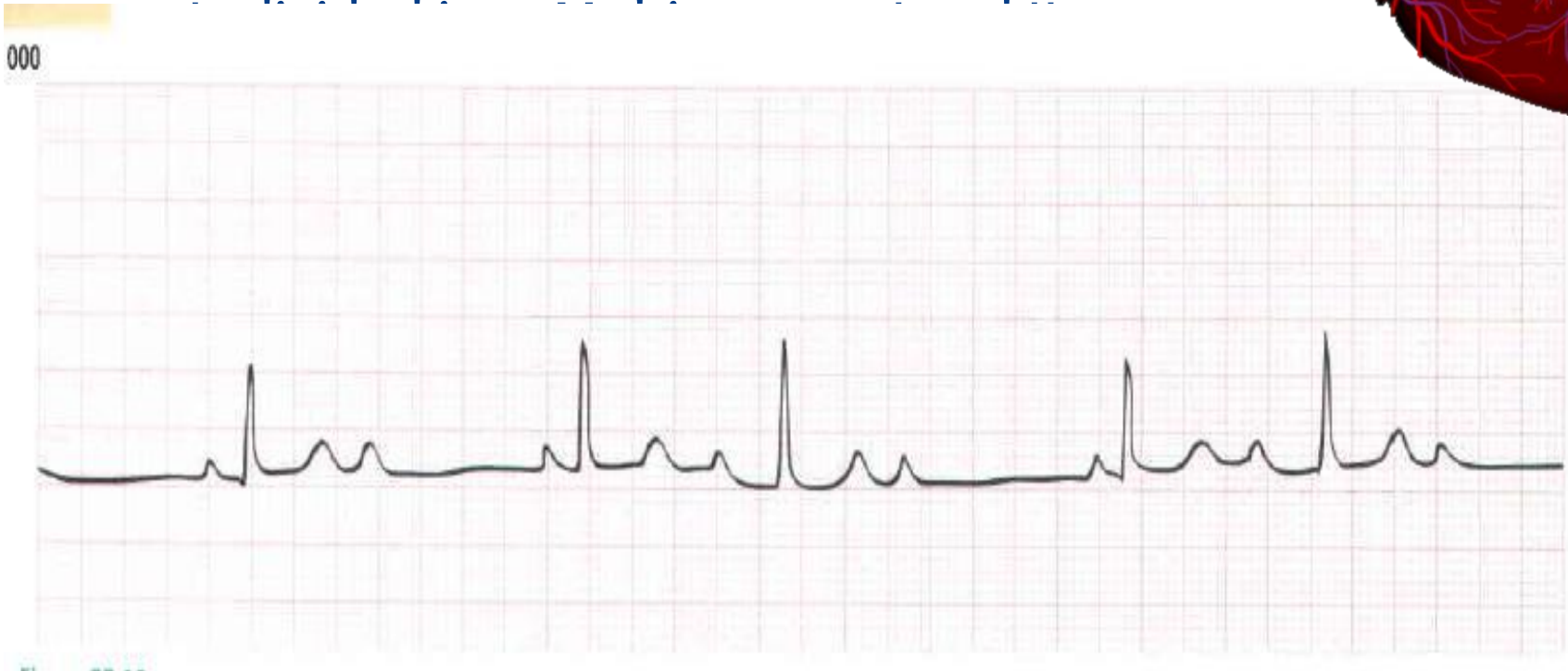
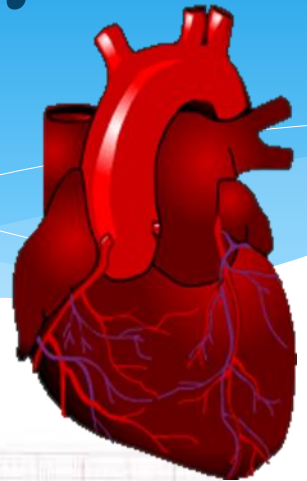
- *Structural problems resulting from AMI or other myocardial diseases



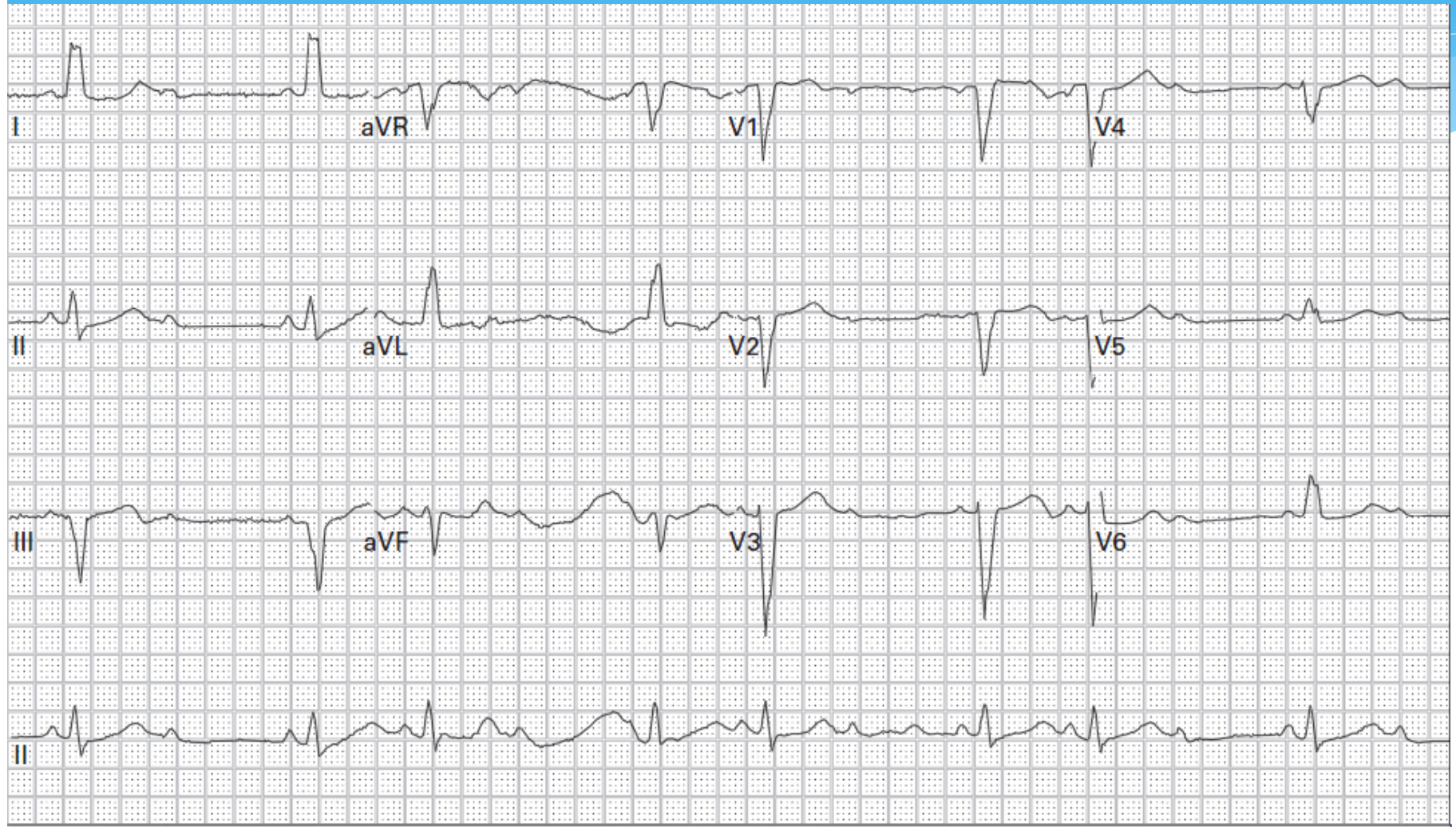
first-degree AV block:



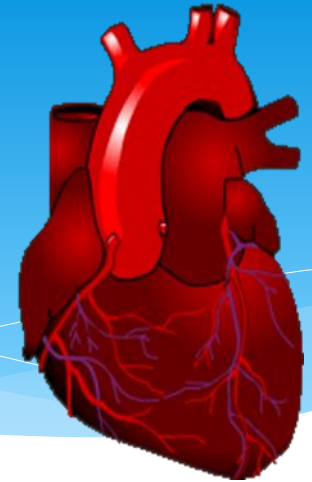
Second-degree AV block:



Mobitz types II:



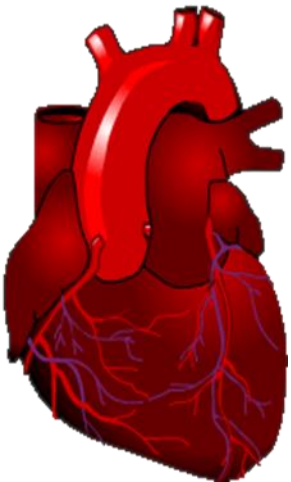
Therapy:



- * Atropine remains the first-line drug for acute symptomatic bradycardia
- * Atropine :
 - * Should be considered a temporizing measure while awaiting a transcutaneous or transvenous pacemaker
 - * For patients with
 - * Symptomatic sinus bradycardia
 - * Conduction block at the level of the AV node
 - * Sinus arrest.

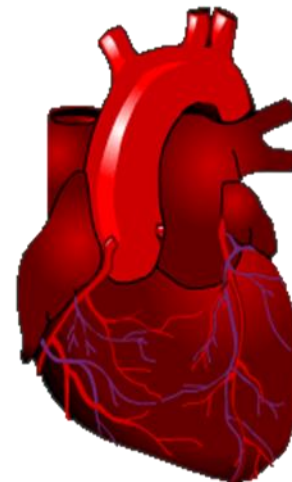
Cont. Atropine:

- * The recommended dose is:
 - * 1 mg IV every 3 to 5 minutes to a maximum total dose of 3 mg.



Cont. Pacing:

- * It is reasonable to initiate TCP in unstable patients who do not respond to atropine
- * symptomatic bradycardia:
 - * Dopamine
 - * Epinephrine

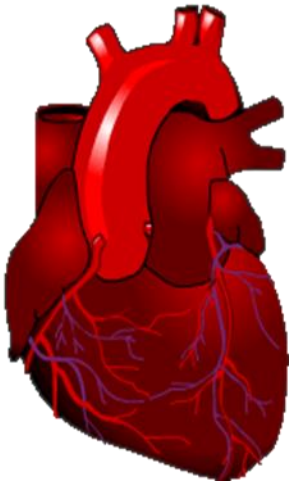


Pacing:

- * TCP may be useful for the treatment of symptomatic bradycardias
- * TCP is, at best, a temporizing measure
- * TCP is painful in conscious patients
- * whether effective or not :
 - * The patient should be prepared for transvenous pacing
 - * And expert consultation should be obtained.

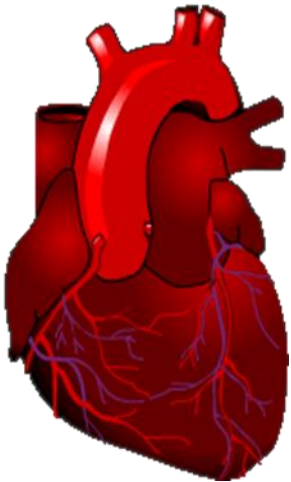
Dopamine:

- * Dopamine infusion may be used for :
- * Begin dopamine infusion at 5 to 20 mcg/kg per minute and titrate to patient response. Taper slowly

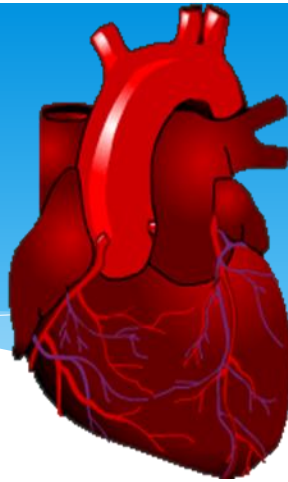


Epinephrine:

- * Begin the infusion at 2 to 10 mcg/min and titrate to patient response



- * you are working on the telemetry unit. You have just received a patient from the emergency department who presented with syncope of unknown cause. They were unable to discover the cause in the emergency department and the decision was made that she be admitted for additional diagnostics and observation. You just finished her initial assessment, which was unremarkable, and left her room to begin catching up on your charting. The monitor technician hands you the following strip.



Question 1 of 5

This rhythm is called a:

Quiz question

Third degree AV block.

Second degree type I AV block.

First degree AV block.

Sinus bradycardia.

Question 2 of 5

You should react to this rhythm by;

Immediately going to the patient's room to assess for serious signs and symptoms.

Giving the MD on call a buzz and describing the rhythm to him or her.

Tell the monitor tech to notify you if this rhythm continues for more than 30 minutes.

Continuing to chart because this rhythm is a normal finding.

Question 3 of 5

You arrive in the room and the patient is semi conscious with a barely palpable pulses. She is extremely pale and diaphoretic. She has an IV in place. You should administer:

Question 4 of 5

While administering the medication you would call for what piece of equipment to be brought to the room immediately?

Transcutaneous pacemaker

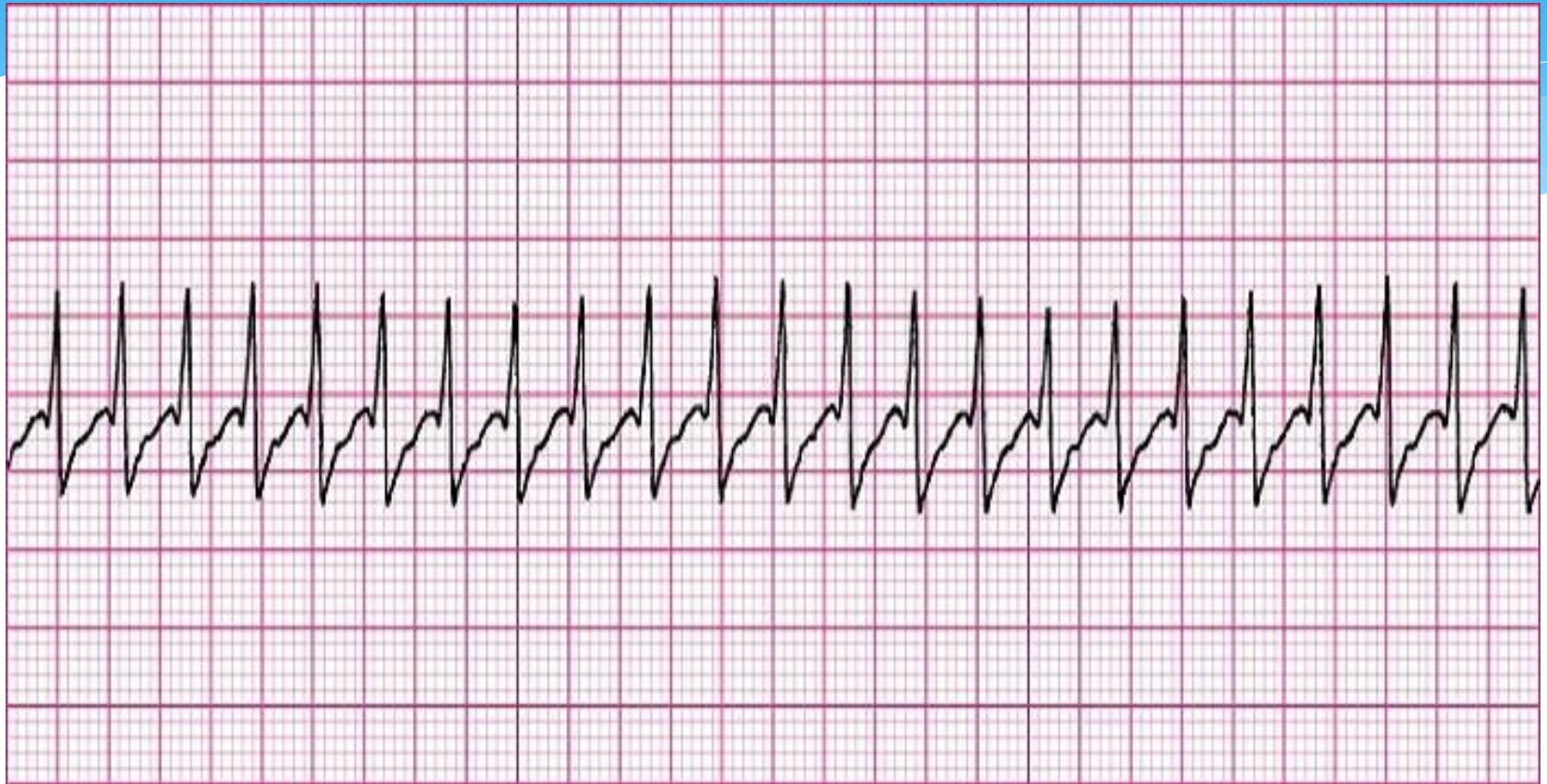
You don't require additional equipment to fix this problem

Suction

Anesthesia equipment for intubation

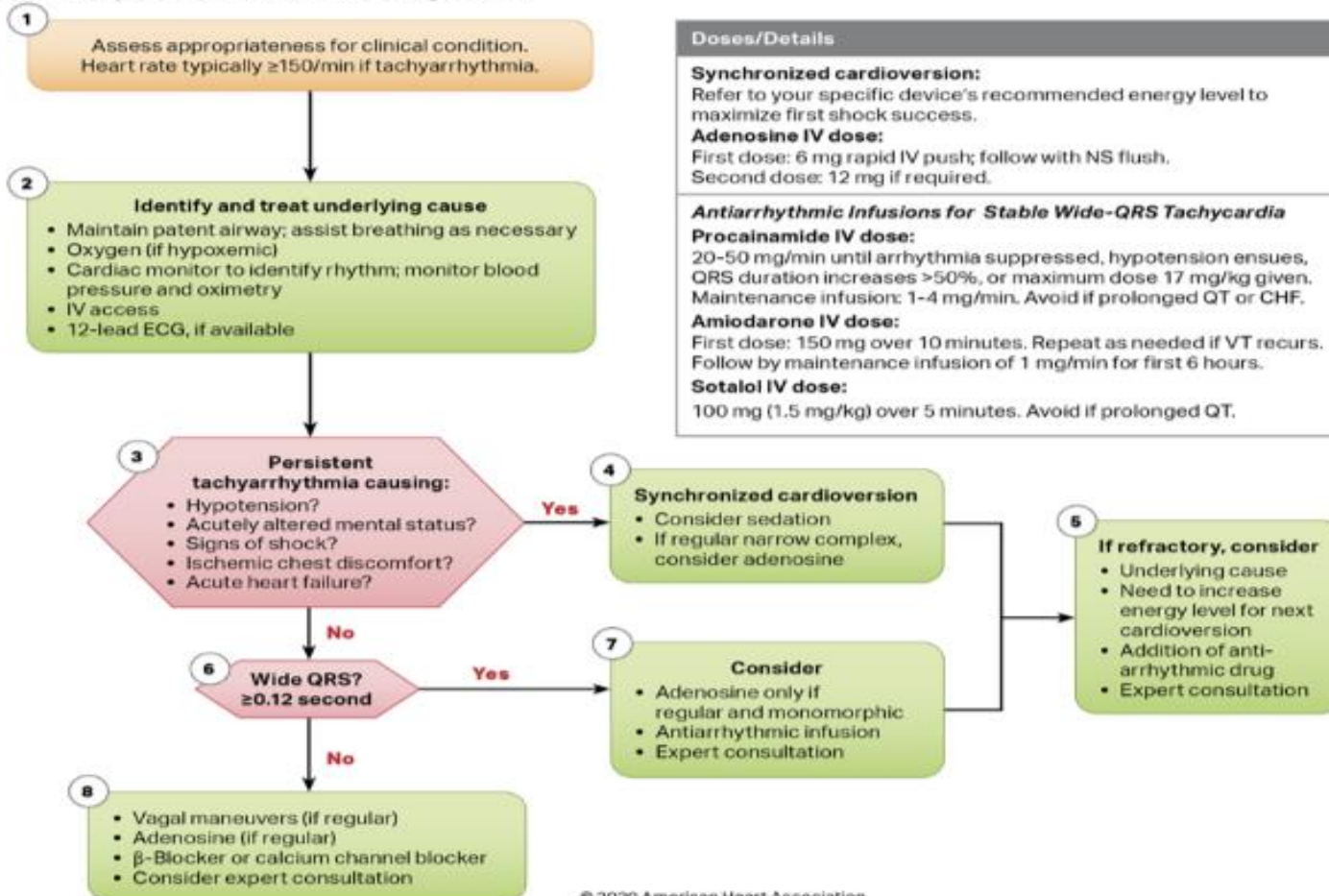


- * You are working in the Emergency Department when a 32-year-old female is brought in by personal vehicle complaining of "feeling her heart beating in her chest and head." Her color is good. She is alert and oriented. Her BP is 138/84. Her pulse is 180. Respirations are 22 and the Pulse Ox is 98% on room air. She states that she was sitting watching television when suddenly it felt like her heart was pounding out of her chest. She got frightened and came to the Emergency Department. She has no significant past medical history.



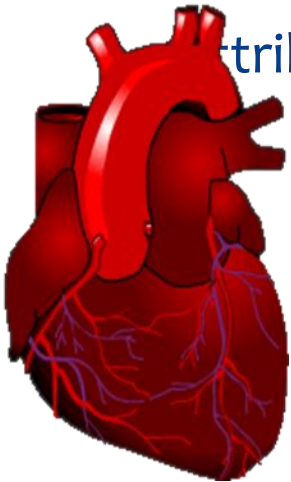
TACHYARRHYTHMIA

Adult Tachycardia With a Pulse Algorithm



Tachycardia is defined as :

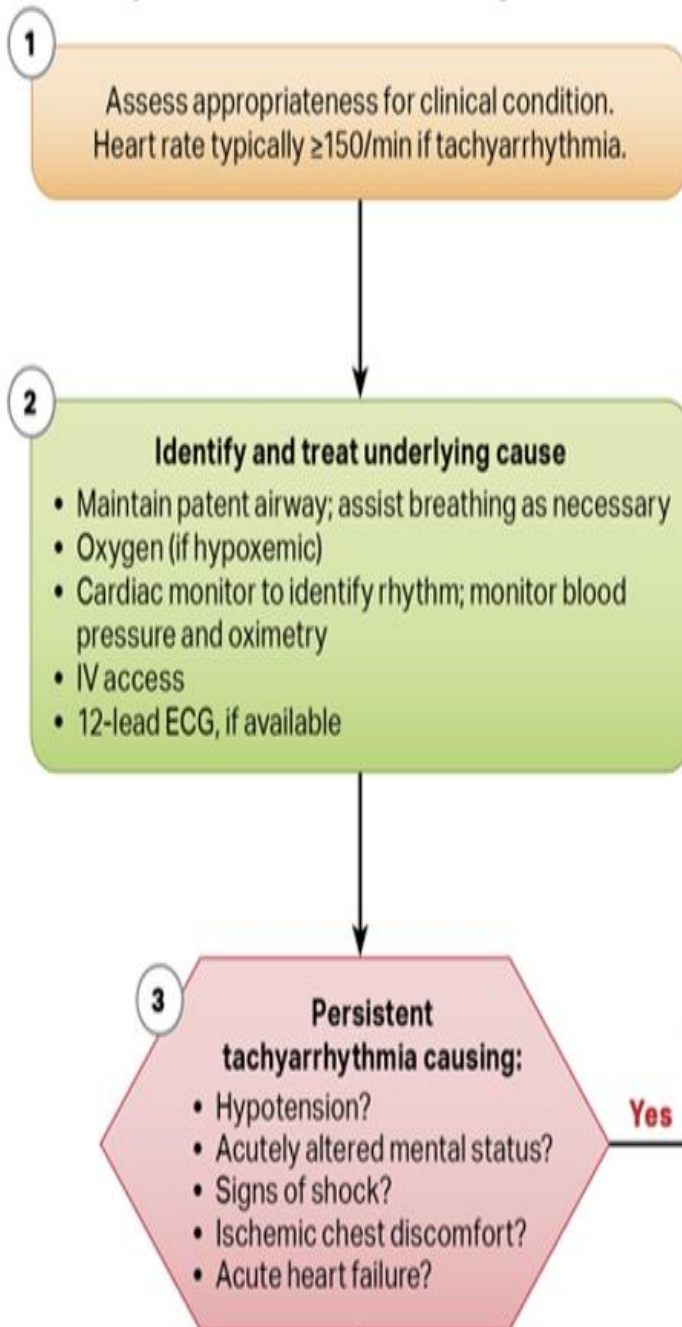
- * An arrhythmia with a rate of 100 beats per minute
- * Rate of **150 beats** per minute is more likely attributable to an arrhythmia



Primary or Secondary cause:

- * Fever
- * Dehydration
- * Other underlying conditions
- * When a heart rate is <150 beats per minute:
 - * It is unlikely that symptoms of instability are caused primarily by the tachycardia

Adult Tachycardia With a Pulse Algorithm



Doses/Details

Synchronized cardioversion:

Refer to your specific device's recommended energy level to maximize first shock success.

Adenosine IV dose:

First dose: 6 mg rapid IV push; follow with NS flush.

Second dose: 12 mg if required.

Antiarrhythmic Infusions for Stable Wide-QRS Tachycardia

Procainamide IV dose:

20-50 mg/min until arrhythmia suppressed, hypotension ensues, QRS duration increases $>50\%$, or maximum dose 17 mg/kg given. Maintenance infusion: 1-4 mg/min. Avoid if prolonged QT or CHF.

Amiodarone IV dose:

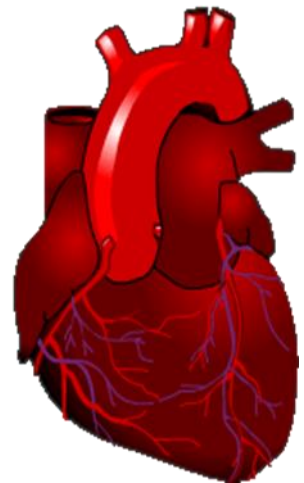
First dose: 150 mg over 10 minutes. Repeat as needed if VT recurs. Follow by maintenance infusion of 1 mg/min for first 6 hours.

Sotalol IV dose:

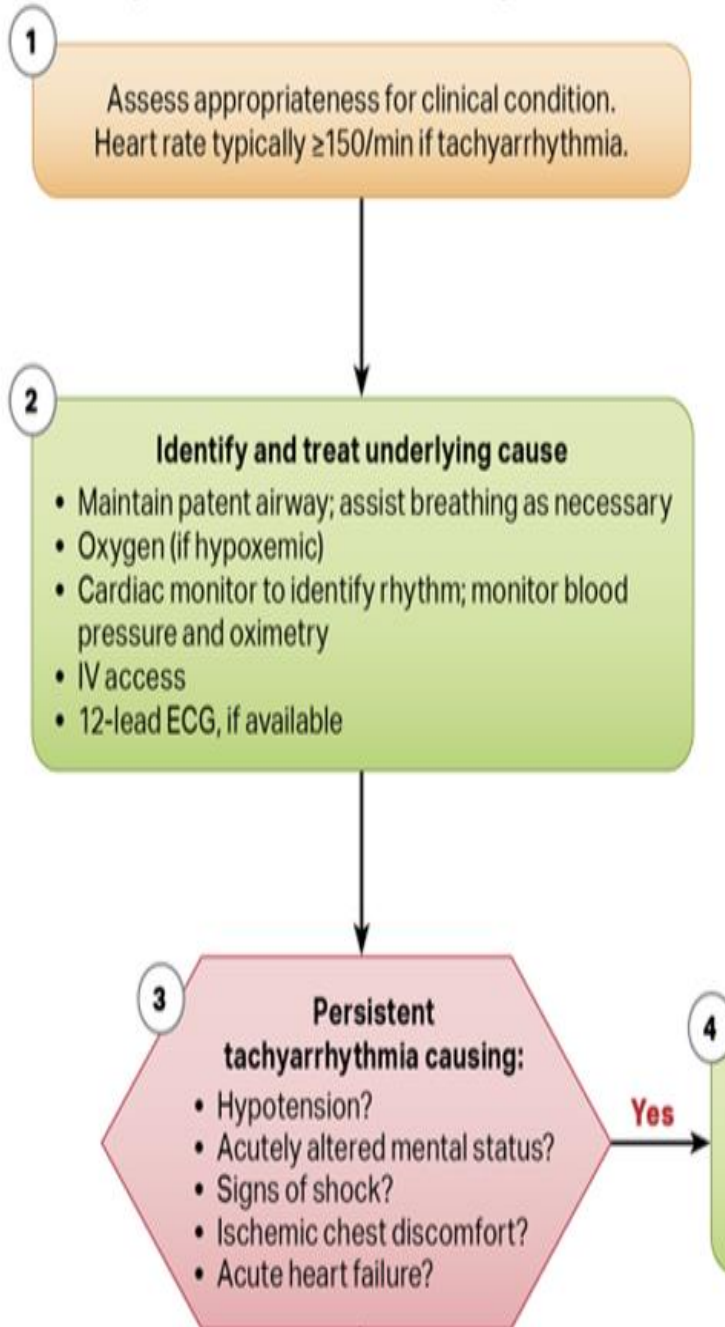
100 mg (1.5 mg/kg) over 5 minutes. Avoid if prolonged QT.

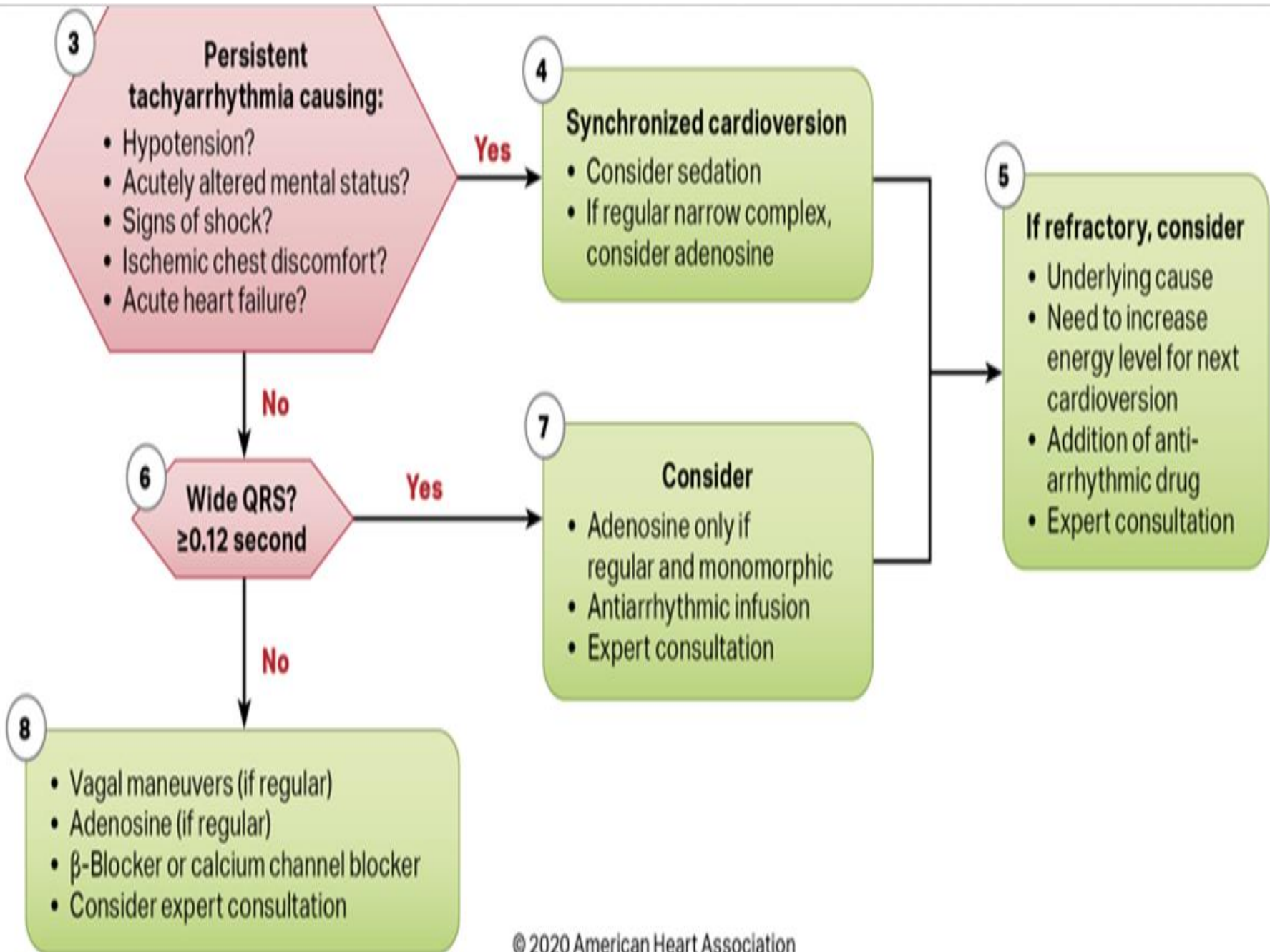
If the tachycardia:

- * Is suspected to be the cause of:
 - * Acute altered mental status
 - * Ischemic chest discomfort
 - * Acute heart failure
 - * Hypotension
 - * Or other signs of shock



Adult Tachycardia With a Pulse Algorithm





Cardioversion:

- * If possible:
 - * Establish IV access before cardioversion
 - * Administer sedation if the patient is conscious
- * Do not delay cardioversion if the patient is extremely unstable

Cont. *Cardioversion*:

* *Synchronized Cardioversion*

Vs

Unsynchronized Shocks(defibrillation)

Doses/Details

Synchronized cardioversion:

Refer to your specific device's recommended energy level to maximize first shock success.

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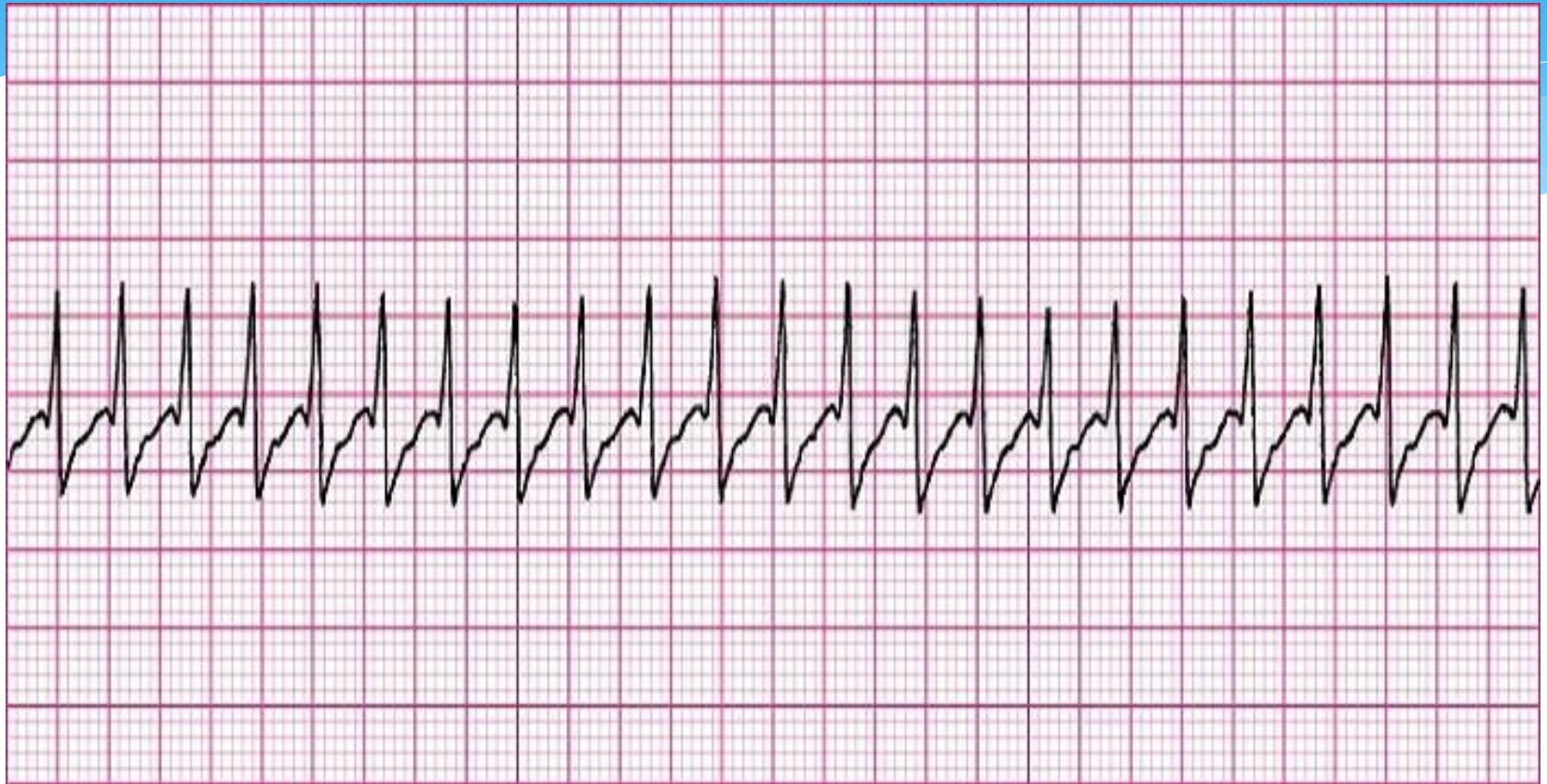
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Activate Windows
Go to Settings to activate Windows.

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Question 1 of 11

One of the first things you want to do is

Check a glucometer reading.

Place the patient on oxygen.

Have her admitted to ICU.

Place the patient on a cardiac monitor.

Question 3 of 11

The patient is placed on the cardiac monitor (this rhythm strip). You immediately recognize this rhythm as:

Quiz question

Ventricular fibrillation.

Ventricular tachycardia.

Atrial fibrillation.

Supraventricular tachycardia.

Question 4 of 11

With a blood pressure of 138/84, good color, a pulse ox of 98% and a chief complaint of palpitations, you decide that this patient has

Stable supraventricular tachycardia.

Cardiac arrest.

Unstable ventricular tachycardia.

Unstable supraventricular tachycardia.

Question 5 of 11

The first step in the treatment of this rhythm would be to

No intervention is necessary.

Administer Amiodarone 150mg IV.

Attempt vagal maneuvers.

Administer Lidocaine 75mg IV.

Question 6 of 11

If this does not improve the rhythm, a reasonable next intervention would be

Amiodarone 300mg IV.

Administer high flow oxygen.

Lidocaine 75mg IV.

Adenosine 6mg IV fast push.

Question 7 of 11

When giving Adenosine, it is important to

Inject it into a 100ml bag of NSS and administer over 10 minutes.

Dilute it with normal saline prior to administration.

Give it slowly to avoid side effects.

Give it fast push followed by a bolus of saline.

Question 9 of 11

While preparing a second dose of Adenosine, the patient suddenly loses consciousness. Her radial pulse is extremely fast and weak. You glance at the monitor and realize that her heart rate has increased to over 200. You should prepare immediately to

Administer Epinephrine 1mg IV push.

Administer a 3rd dose of Adenosine.

Perform synchronized cardioversion or unsynchronized if a delay will occur.

Begin CPR.

Question 10 of 11

A fast, narrow complex tachycardia that causes hypotension, chest pain, shortness of breath or other life threatening symptoms is referred to as

Stable ventricular tachycardia.

Ventricular fibrillation.

Unstable supraventricular tachycardia.

Stable supraventricular tachycardia.

Wide-QRS-complex tachycardias:

- * Ventricular tachycardia (VT)
- * Ventricular fibrillation(VF)
- * SVT with aberrancy
- * Pre-excited tachycardias (Wolff-Parkinson-White syndrome)
- * Ventricular paced rhythms

باسپاس از شما

