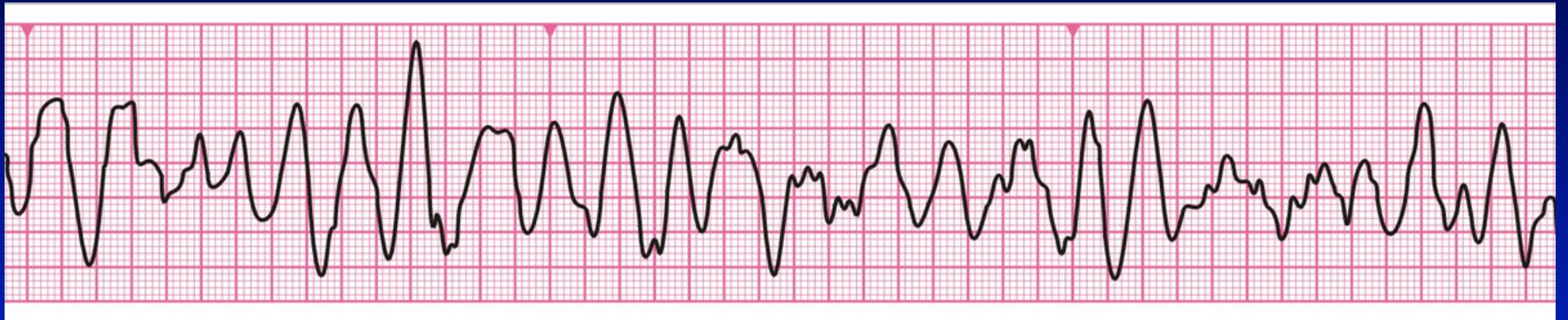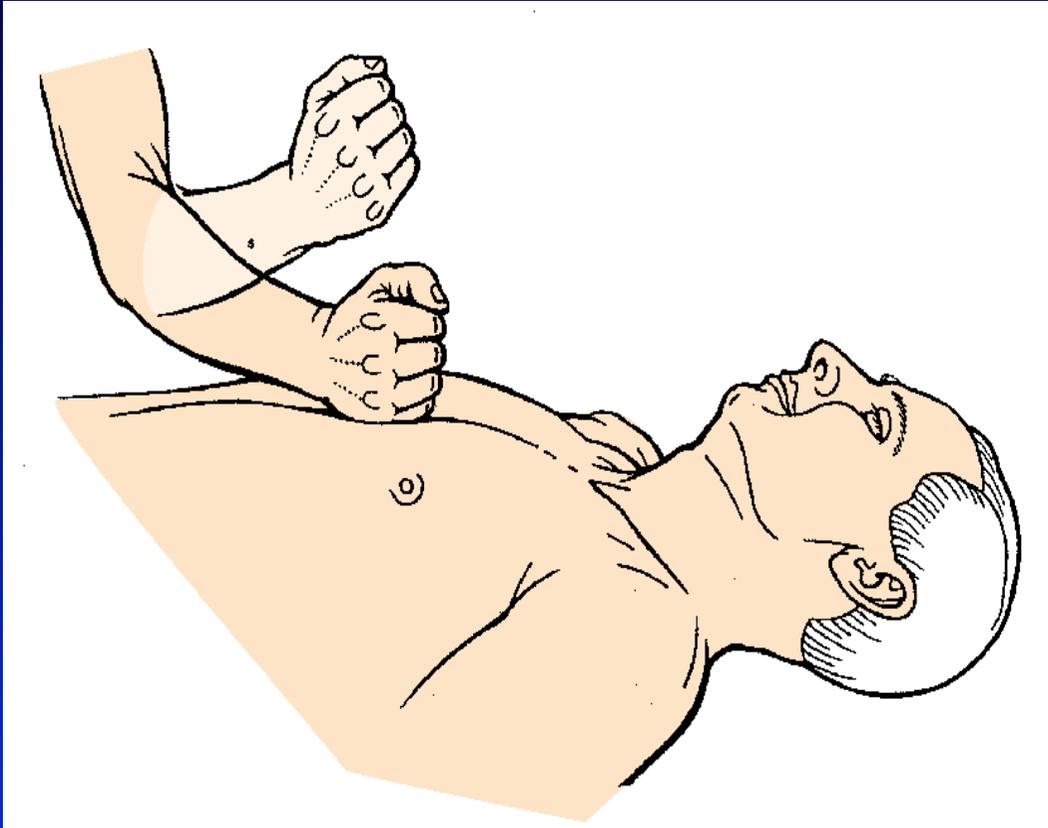# ALS UNIVERSAL TREATMENT ALGORITHM

I1

Objectives

To understand:

- Treatment of patients in:
  - ventricular fibrillation and pulseless ventricular tachycardia
  - asystole or pulseless electrical activity (non-VF/VT rhythms)

I2

I3

Precordial thump

- Indication:
  - witnessed or monitored cardiac arrest

Cardiac Arrest
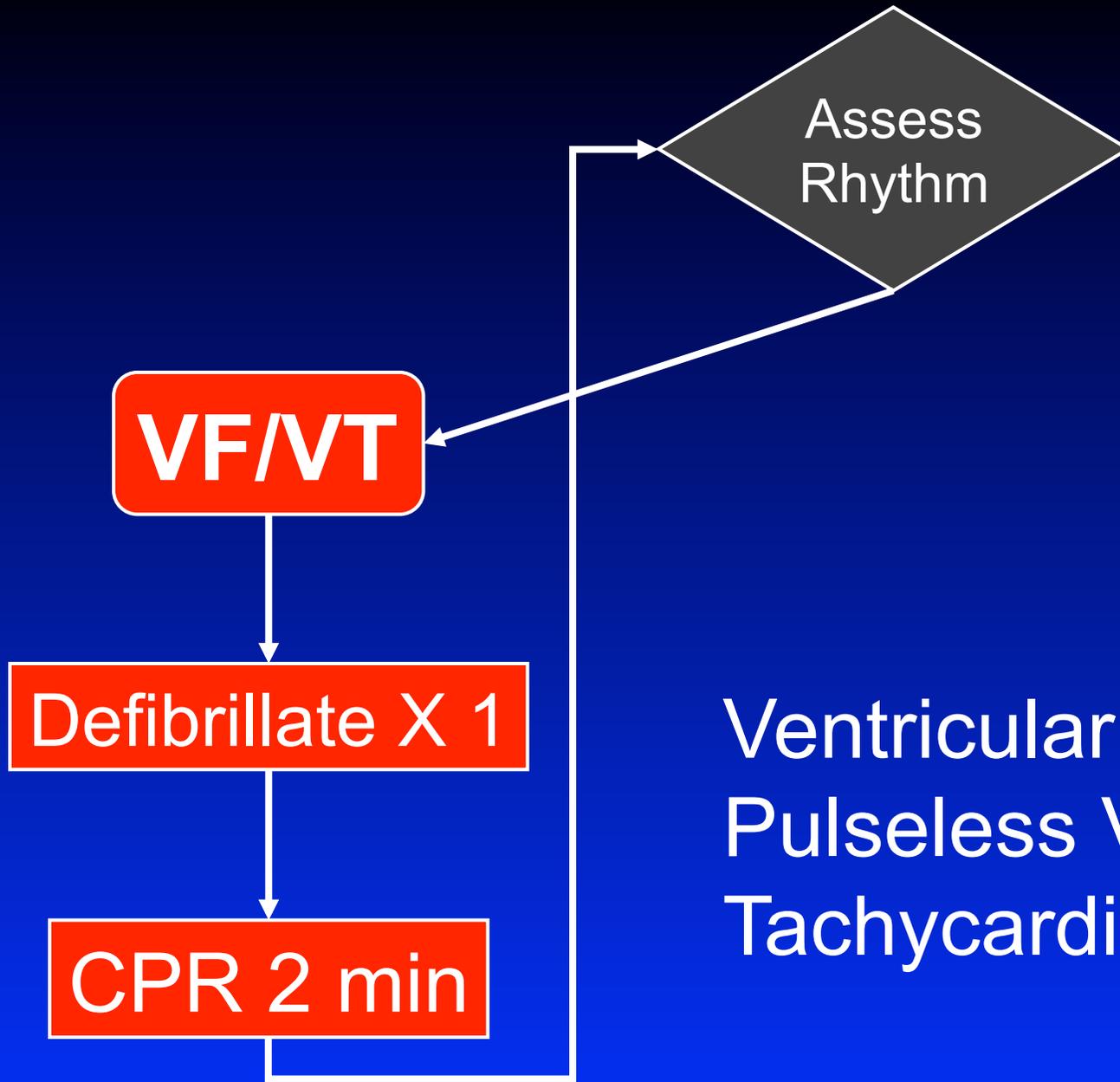
Unresponsive?
Not breathing or only occasional gasps

BLS Algorithm if appropriate
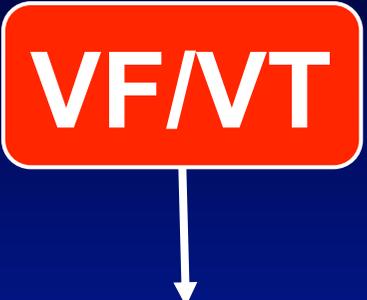
Attach Defib-Monitor

Assess
Rhythm

VF/VT

Non-VF/VT

I5

Assess Rhythm

VF/VT

Defibrillate X 1

CPR 2 min

Ventricular Fibrillation/ Pulseless Ventricular Tachycardia

VF/VT

Shock 200 J biphasic
or
Shock 360 J monophasic

During CPR
Correct reversible causes

If not already:
- check electrodes, paddle position and contact
- attempt / verify: airway & O_2

                              i.v. access

- give epinephrine every 3 min

Consider:
Amiodarone, Lidocaine / pacing, buffers

Chest compressions, airway and ventilation

- Secure airway:
  - tracheal tube
  - LMA
  - Combitube
- Once airway secured, do not interrupt chest compressions for ventilation

19

Intravenous access and drugs VF/VT

- Central veins versus peripheral
- Epinephrine 1 mg i.v. or 2-3 mg tracheal
- Consider amiodarone 300 mg if VF/VT persists after 3rd shock
- Alternatively - lidocaine 100 mg
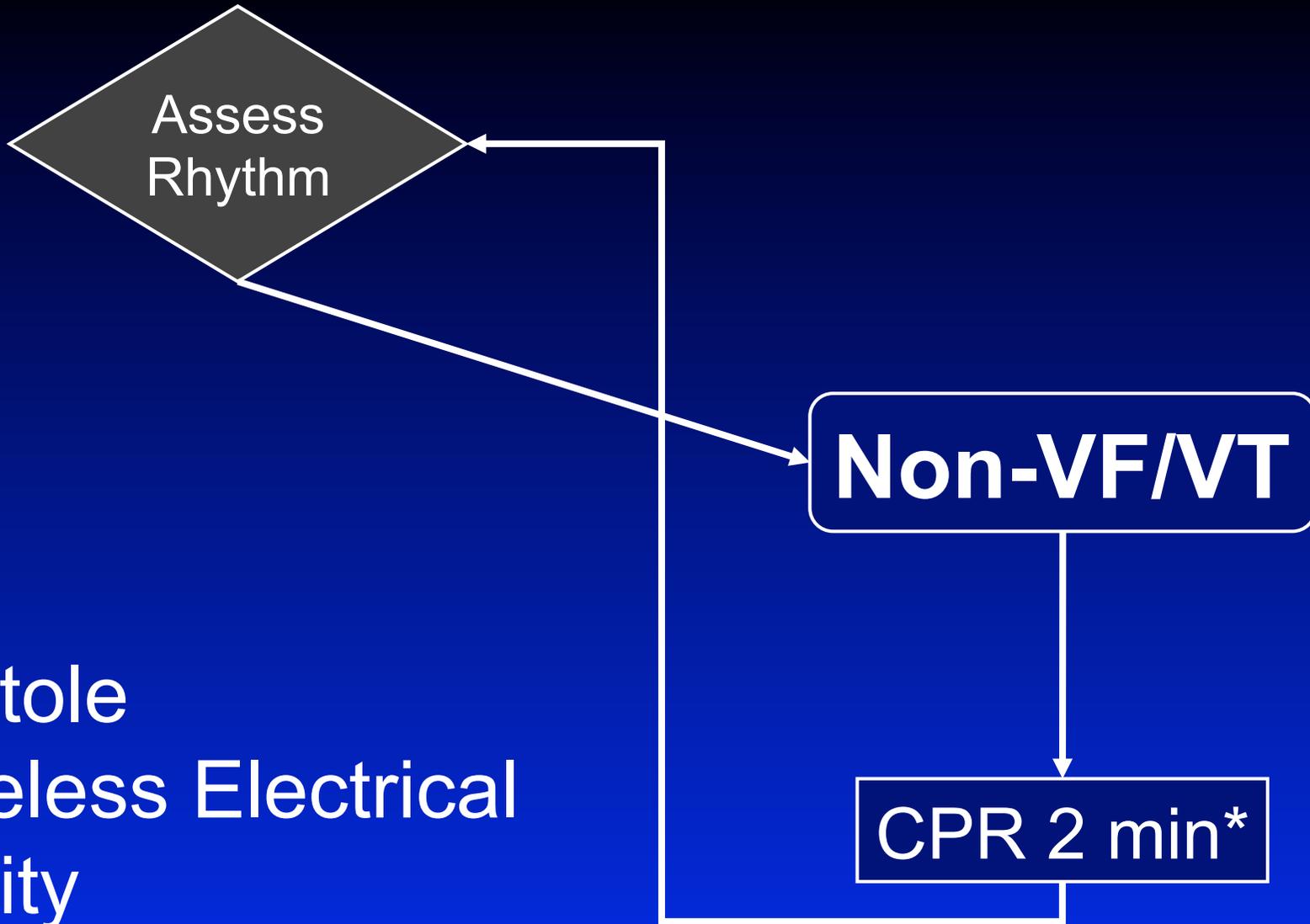- Consider magnesium 8 mmol

VF/VT (continued)

Shock 200 J biphasic
or
Shock 360 J monophasic

- Epinephrine every 3 minutes (first dose after the third shock)

- Consider paddle positions

I11

Assess Rhythm

Non-VF/VT

Asystole
Pulseless Electrical Activity

CPR 2 min*

Potential reversible causes:
- Hypoxia
- Hypovolaemia
- Hypo/hyperkalaemia & metabolic disorders
- Hypothermia
- Tension pneumothorax
- Tamponade
- Toxic/therapeutic disorders
- Thrombo-embolic & mechanical obstruction

Asystole

- Confirm:
  - check leads - view via leads I and II
  - check gain
- Epinephrine 1 mg every 3 minutes

I14

Pulseless electrical activity

- Exclude/treat reversible causes
- Epinephrine 1 mg every 3 minutes

I15

Any Questions?