



Reverzibilni uzroci Cardiac Arresta

4T

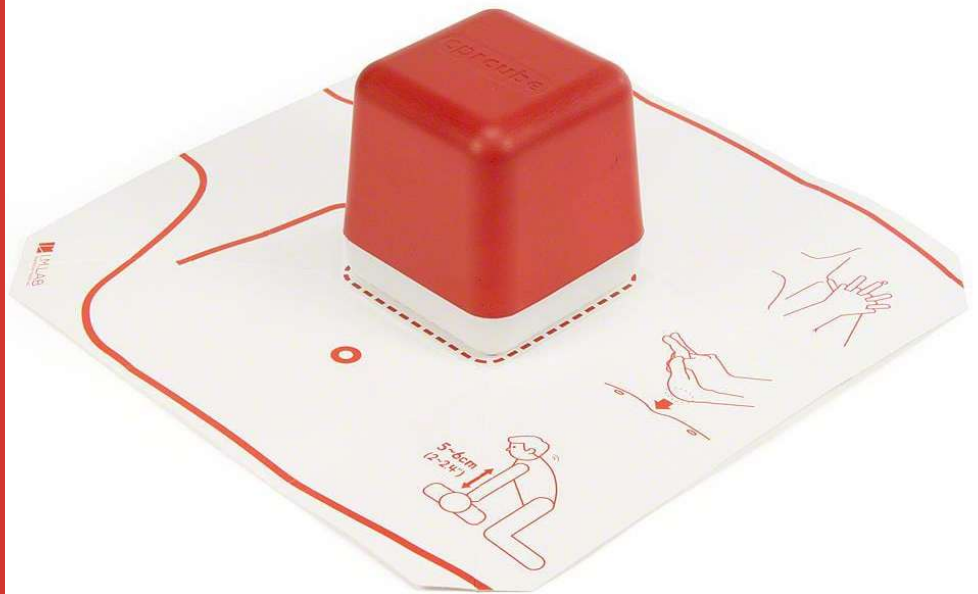
Društvo lekara urgentne medicine Srbije

Kritičan pacijent



- Anamneza
- Vitalni parametri:
 - TA
 - SF
 - RF
 - SpO2
 - TT
 - Šuk
- BLS
- ALS

#fact:
every minute
without CPR
survival rate
decreases
by 10%





Adobe Stock | #307657443



TROMBOZA

PTE

TROMBOZA
KORONARNIH
ARTERIJA

Anamneza, klinika
Kapnografija, EHO

Anamneza,
Klinika, EHO

EABP, ETCO₂

Ventrikularne
aritmije, AIM



Modifikacija ALS za PTE

- (≤ 500 ml) tečnosti može da poveća kardijalni index kod pacijenata sa PTE i popravi TA.
- Vazopresori i/ili inotropi,
- Intravenski nefrakcionisani heparin (UFH)
- Trombolitički lekovi . Kada su dati CPR pokušaj nastaviti najmanje 60/90 min pre proglašenja smrti.
- Hirurška embolektomija ili perkutana mehanička trombektomija
- Extrakorporalna CPR

Table 5 – Prevalence of significant coronary artery disease among patients with ventricular fibrillation/pulseless electrical tachycardia out-of-hospital cardiac arrest.

	ROSC		Refractory VF/pVT
	ST elevation	No ST elevation	
Prevalence of significant CAD	70–95%	25–50%	75–85%
Prevalence of acute lesions	70–80%	25–35%	60–65%

Modifikacija ALS za Coronarnu trombozu

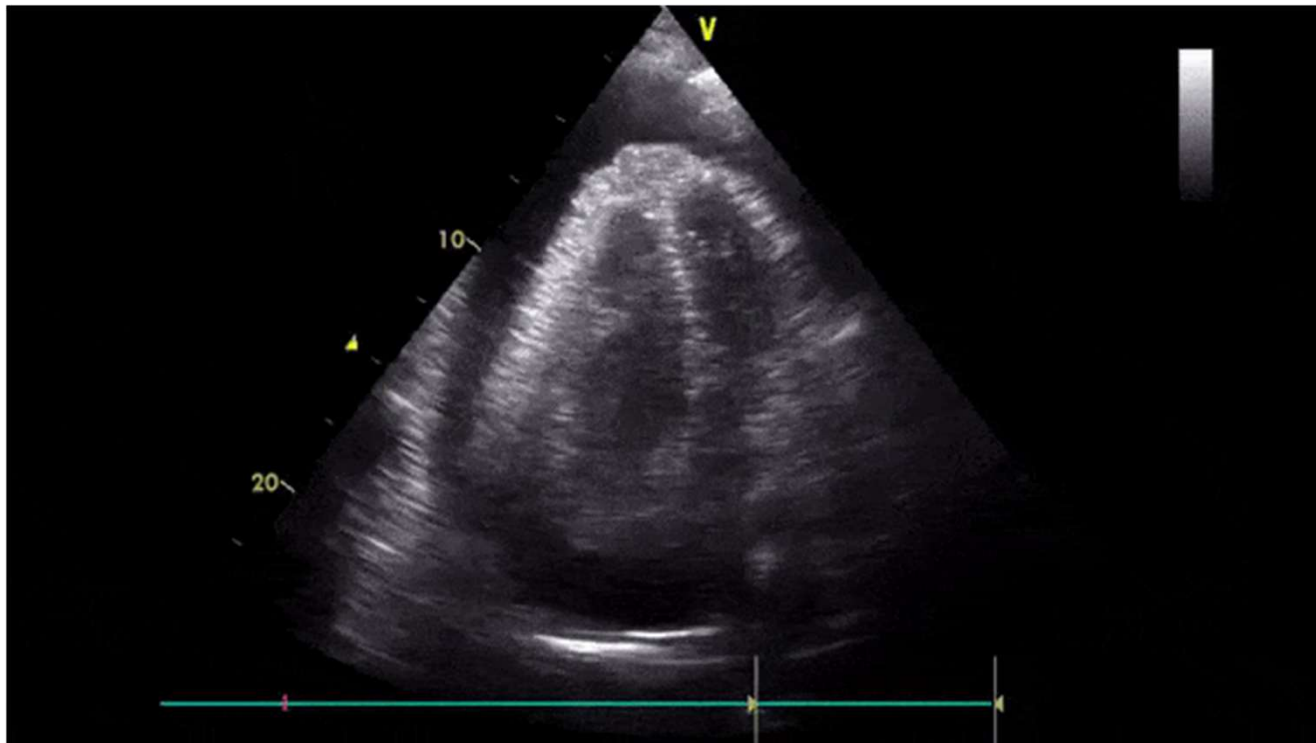
Konsenzus: reanimirani
pacijent sa STEMI potrebno je
da ide na hitnu reperfuziju.

- Brza evaluacija u ED da se isključe očigledni nekardiološki razlozi .
- Suspektna miokardna ishemija ili je pacijent hemodinamski ili električno nestabilan - rana koronarografija (≤ 120 min).
- Stabilnim pacijentima posle ROSC a bez STEMI, treba odložiti koronarografiju,
- Rutinska koronarografije nije preporuka kod pacijenata kod kojih nema povratka hemodinamske stabilnosti i princip treba biti individualizovan.

TAMPONADA SRCA

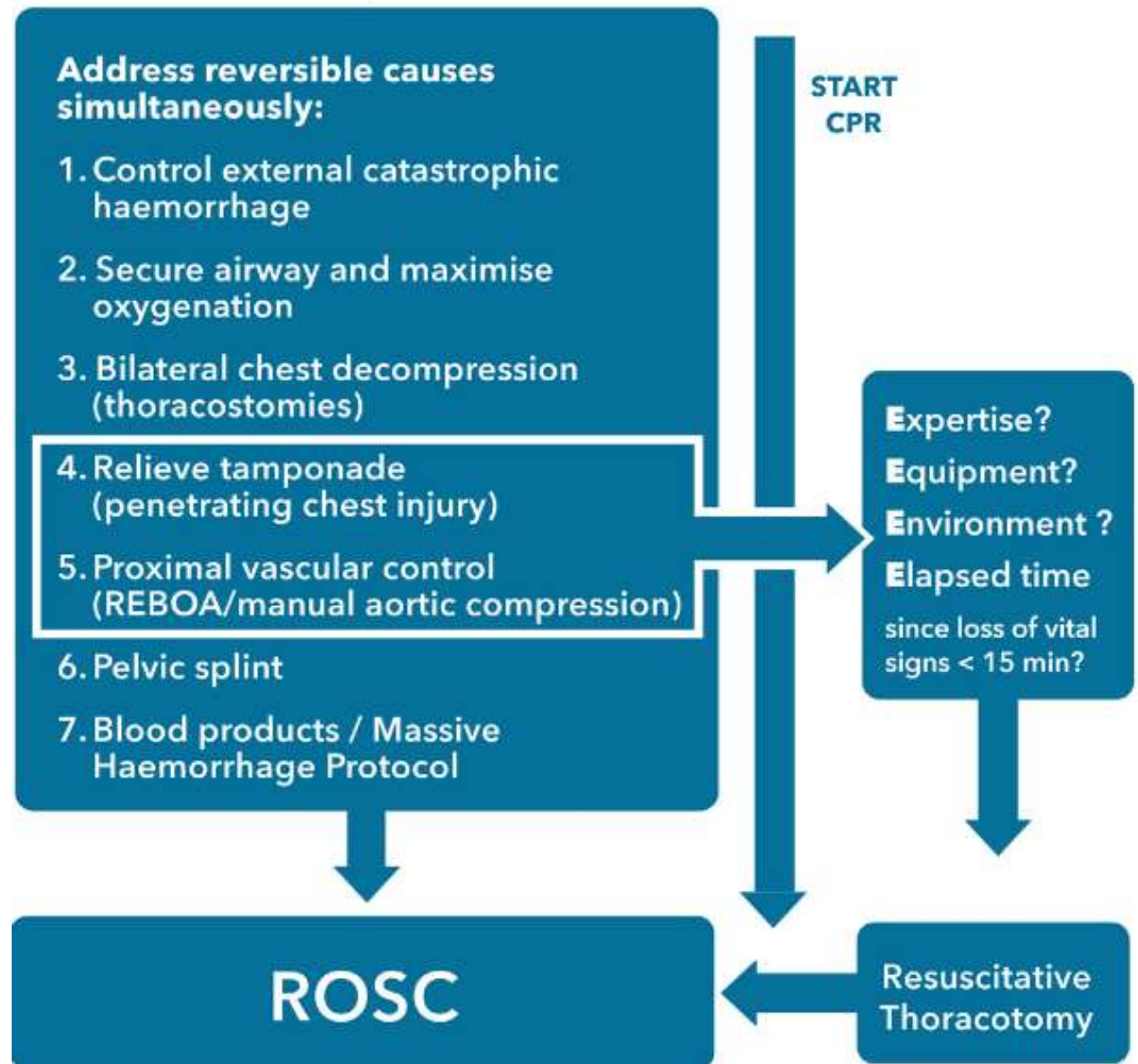
Penetraciona
trauma,
kardiohirurgija





EHO

Modifikacija ALS kod tamponade perikarda



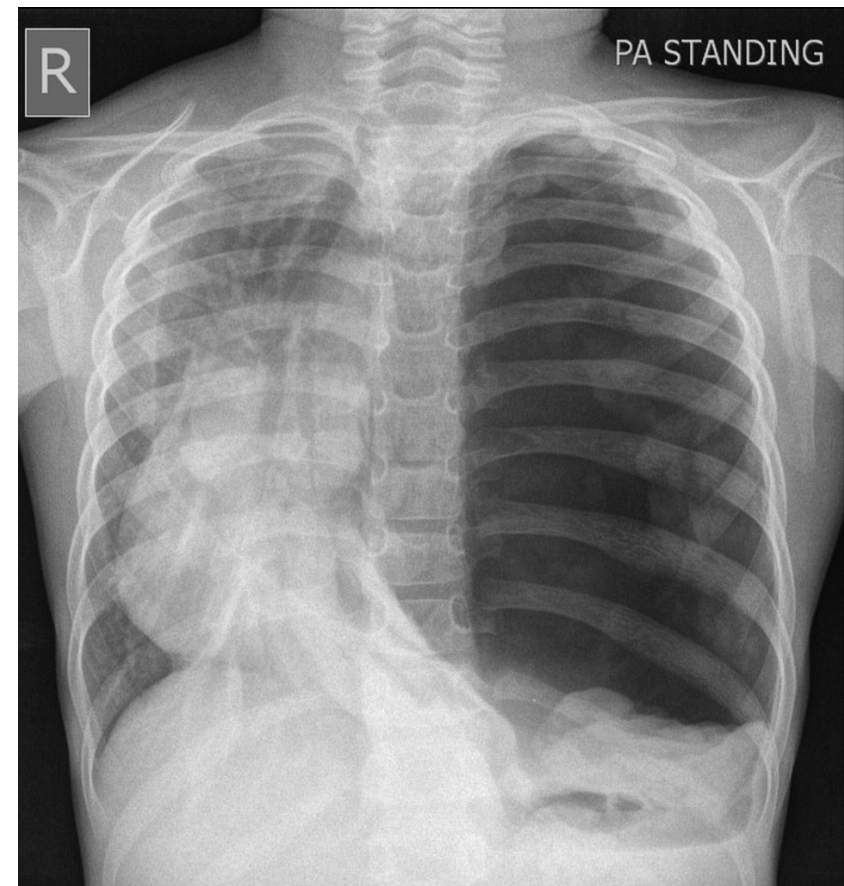
TENZIONI PNEUMOTORAX

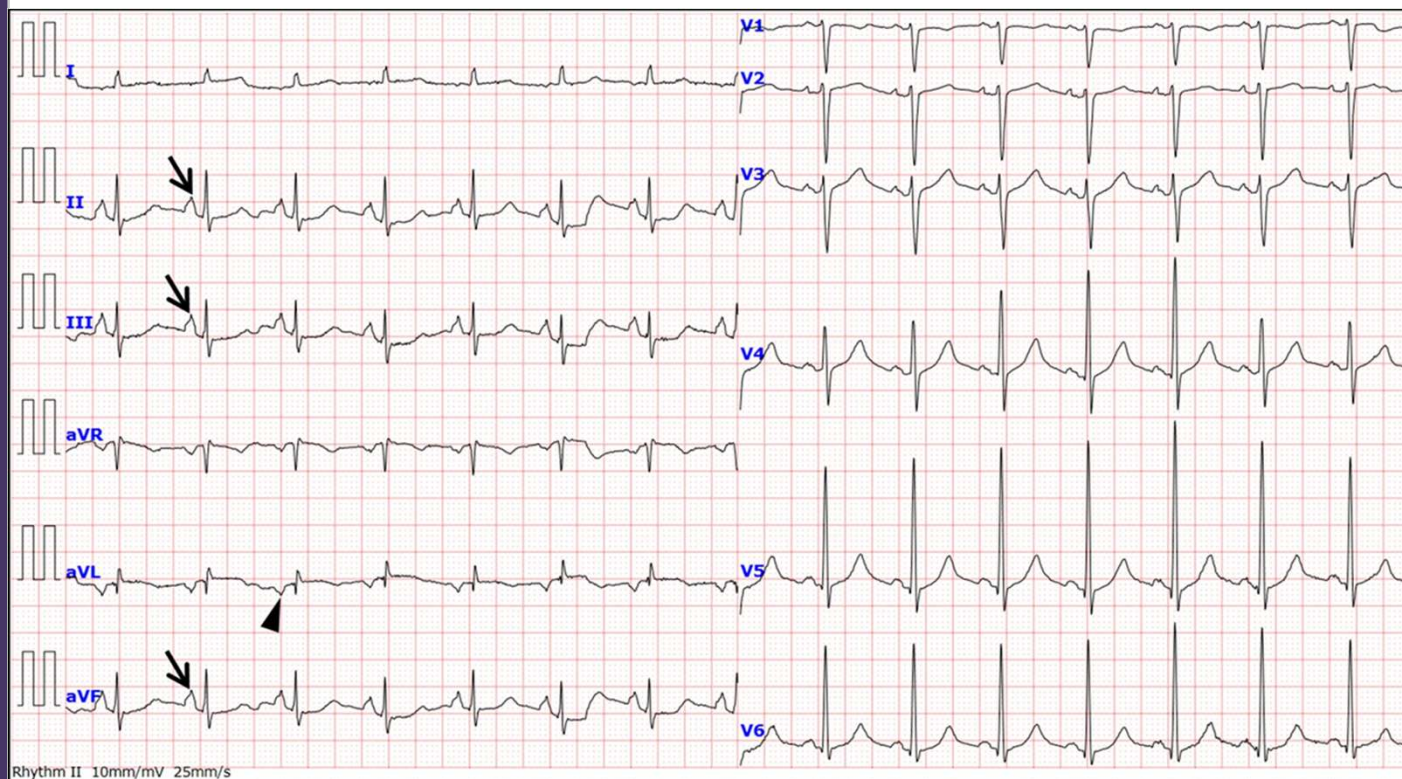
Oslabljen/nečujan disajni
šum

Hemodinamska
nestabilnost

Abnormalnosti EKG-a
povezane sa levom
pneumotoraksom

Abnormalnosti EKG-a
povezanih sa
pneumotoraksom sa desne
strane ostaje dvosmislena.





EKG:
sinusna tahikardija
100/min

izraženu faznu
varijaciju napona
qRS kompleksa u
prekordijalnim
odvodima (V4–6).

visoka amplituda P-
talasa u inferiornim
odvodima i
vertikalna osa
inverzija P-talasa u
aVL

- 
- Dubina tubusa
 - Devijacija traheje

- 
- Promene na zidu
 - Subkutani emfizem

- 
- Torakocenteza
 - Torakotomija

Modifikacija ALS
kod tenzionog
pneumothoraxa

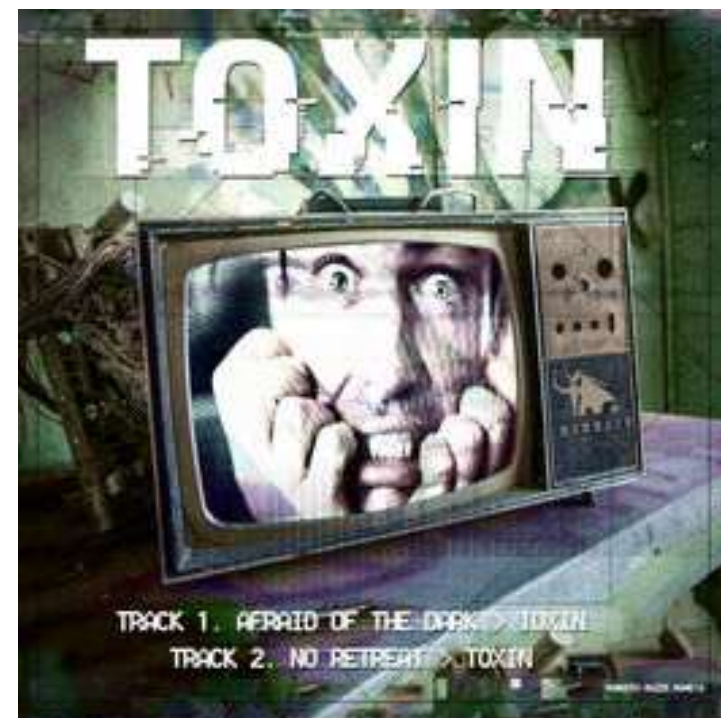
TOXINI

ASPECT

ANAMNEZA

KLINIČKI
ZNACI, NALAZ

LABORATORIJA



Toxic exposure



If indicated:
Decontamination
Enhanced elimination
Antidote

- Avoid mouth-to-mouth breathing
- Continue resuscitation
- Higher dose of medication

Toxini

Alcohol

Respiratorna depresija ili
aspiracija povraćajnog sadržaja

Opioidi

Respiratorna insuficijencija i/ili CA
zbog sekundarnog oštećenja
miokarda zbog hipoksije

Benzodiazepini

Respiratorna depresija ili
aspiracija povraćajnog sadržaja

Psychostimulansi

Smrt nastaje zbog arrhythmija,
hypertermije i ICH.

Hallucinogeni

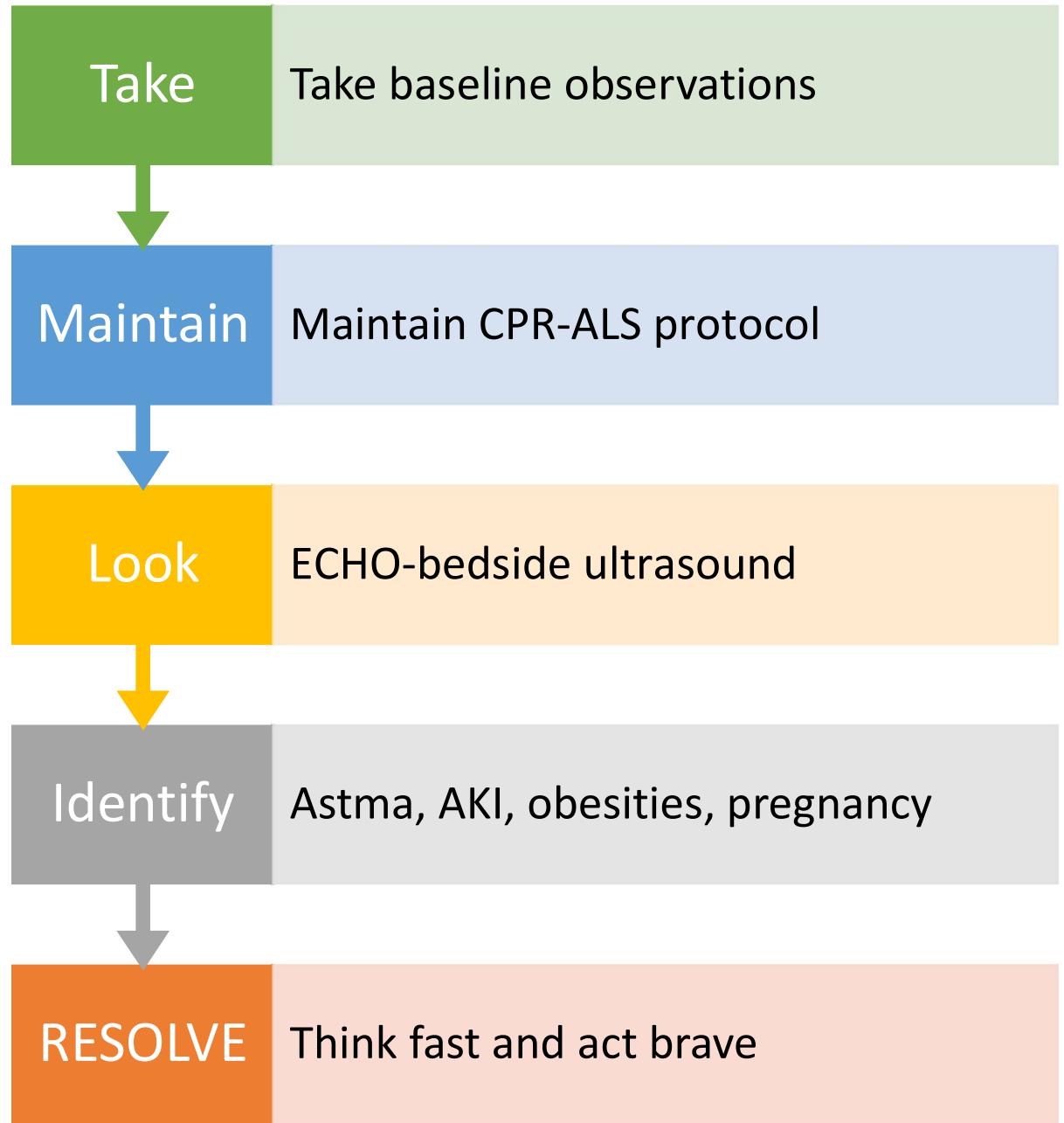
Konvulzije i posledična trauma

Dostupni antidoti

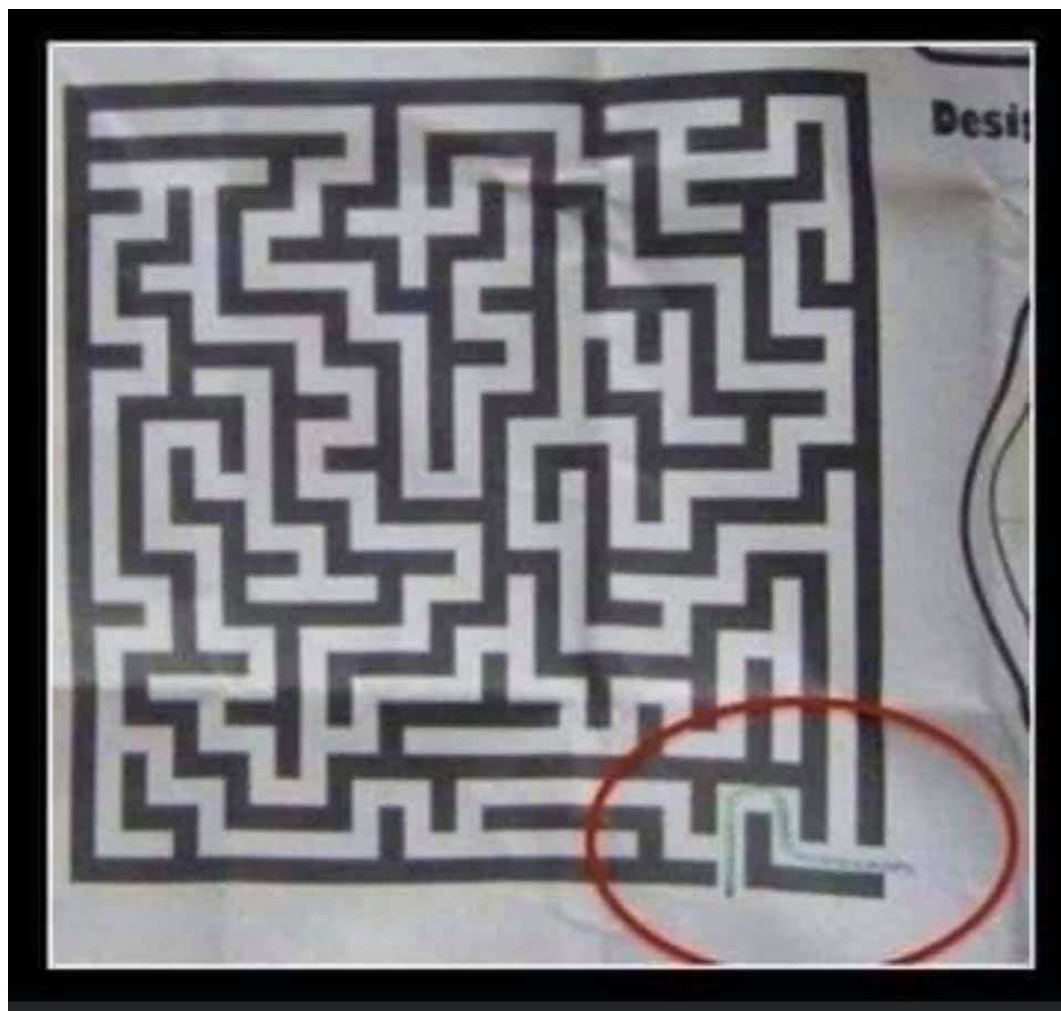
Naloxon
Anexate

KONTROLA DISAJNOG
PUTA I OXIGENACIJE

Take
home
message



HVALA NA PAŽNJI



Treatment is as for any MI with ACS protocol and emergent PCI.

PE

- Collateral history or past medical history may be suggestive
- Common physical findings pre- arrest include distended neck veins and tachycardia.
- Echo may show clot or strain in the right ventricle
- Treatment is via surgical evacuation or fibrinolysis

For patients with cardiac arrest and without known PE, routine fibrinolytic treatment given during CPR has shown no benefit and is not recommended.

Toxins

Cardiac arrest caused by toxins, and identifying specific toxins, can be extremely difficult to diagnose without collateral information either from family/ friends or emergency services.

If toxins are suspected it will usually mandate a **prolonged resuscitative effort.**

Cocaine is the most common street drug causing cardiac arrest.

Common prescribed causes include:

- Tricyclic antidepressants

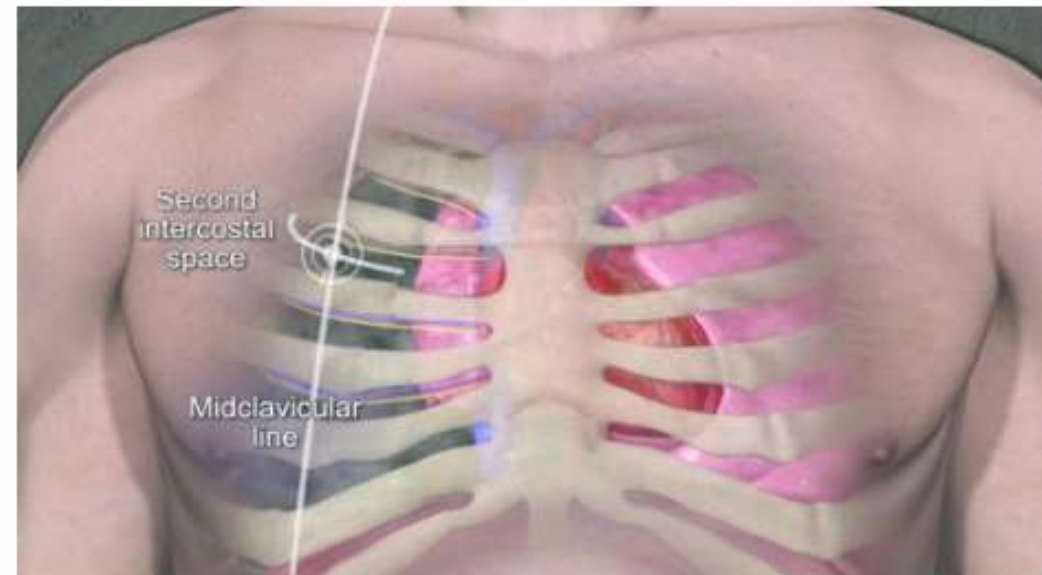
Features:

Respiratory distress, reduced chest wall movement & air entry on affected side, **hyper resonance and difficulty ventilating.**

Hypotension, tachycardia, PEA arrest

Tracheal deviation is a late sign.

Treatment is by emergent needle thoracostomy (2nd intercostal space, midclavicular line)



Cardiac Tamponade

- Fluid in pericardial sac compresses the heart preventing filling during diastole reducing stroke volume.
- Can be caused by blunt or penetrating trauma

Presents as **low BP, distended neck veins & muffled heart sounds.**

Pericardial fluid may be visible on ultrasound

Acutely, **<100mls** can cause significant cardiac impairment

Treatment is by emergent needle Pericardiocentesis.