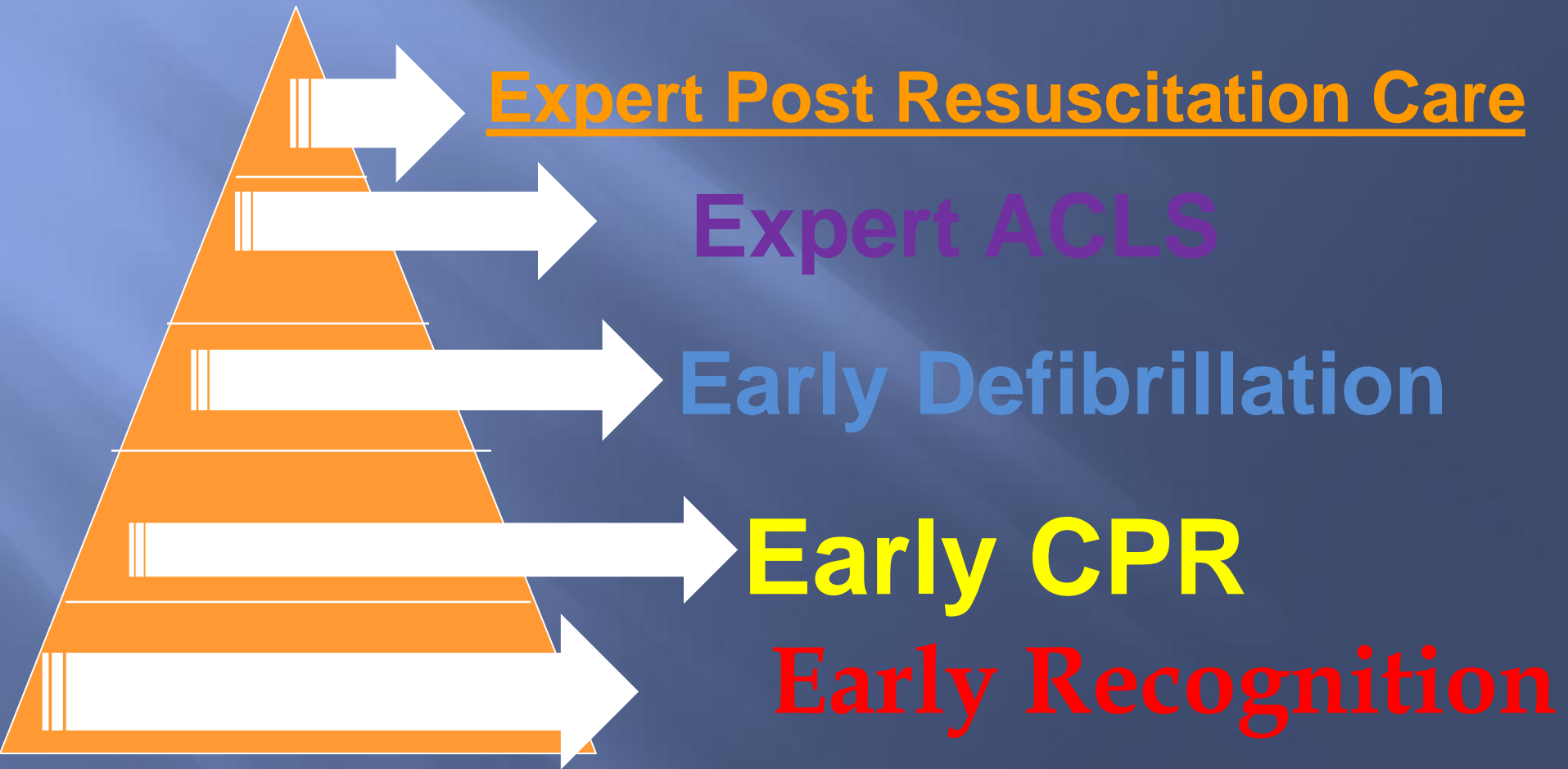


# PROLONGED LIFE SUPPORT (PLS)

ارائه از افشین فرهانچی  
متخصص بیهوشی و مراقبتهای ویژه  
دانشگاه علوم پزشکی همدان (ابن سینا)

# Pyramid of Resuscitation



# We learn

1- Define Successful CPR

-----Post Resuscitation CARE

2- Define CVS Evaluation & Support

3- Define CNS Evaluation & Support

4- Define PUL Evaluation & Support

# احیا موفق

بازگشت خودبخود جریان خون:

□ ریتم سوپرا و نتریکولار با نبض

□ فشار سیستولیک بالای ۶۰

# ارزیابی ارگانهای اصلی و حمایت از آنها

- سیستم قلبی عروقی
- سیستم مغز و اعصاب
- سیستم تنفسی و ریوی
- سیستم کلیوی

# EVALUATION CARDIOVASCULAR

1. 12 LEAD ECG
2. EMERGENCY CORONARY ANGIOGRAPHY
3. ECHO
4. CXR

# SUPPORT CARDIOVASCULAR

1- VOLUME

2- VASOACTIVES

3- INOTROPE

4- INODILATOR

5- ANTI ARHYTHMIA

6 – STENT / CABG / IABP / LVAD

# EVALUATION NEUROLOGIC

**1- EEG**

**2 – IMAGING**



# SUPPORT NEUROLOGIC

- 1- Maintain CPP (MAP/ICP/CVP)
- 2- Hypothermia
- 3- Sedation & Paralysis
- 4- Glucose Control
- 5- Seizure Treatment
- 6- Head up Position

# EVALUATION PULMONARY

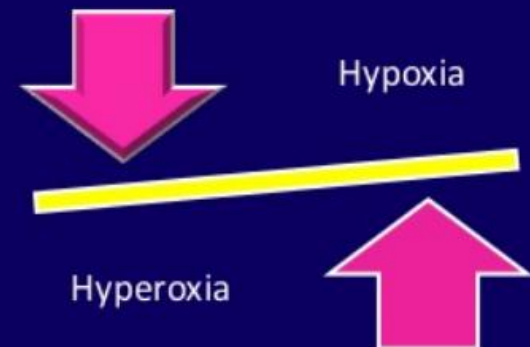
1. ABG
2. CAPNOGRAPHY
3. CXR
4. Injury

# SUPPORT PULMONARY

- 1- Normocapnia
- 2- Normoxia
- 3- Prevent Lung

# Ventilatory Support

- Goals:
  - $SpO_2 \sim 94-99\%$
  - $PaCO_2 - 40-45$  mmHg.
- How?
  - Titrate  $FiO_2$
  - Set Tidal volume of 6-7 ml/kg
  - 10-12 breath/mt



# Prolonged Life Support

## Rules of 100s

**1 - S.B.P  $\geq$  100**

**2 - Spo2  $<$  100**

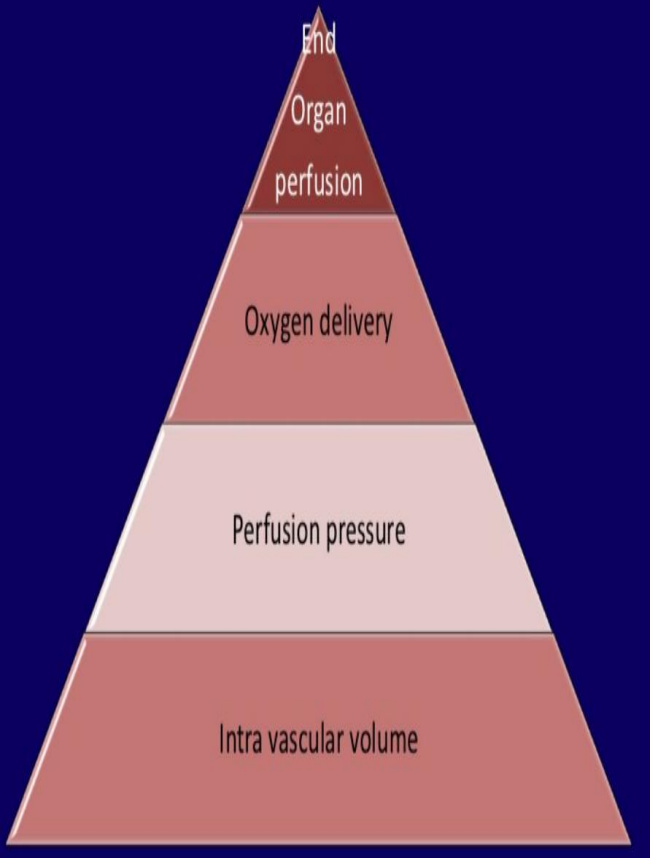
**3 - B.S  $\geq$  100**

**4 - U.O.P = 100**

**5 - Temp  $<$  100**

**6 - M.V = 100**

Optimization of Cardio Vascular function



# 1- BLOOD PRESSURE (PERFUSION)

(100 mmhg)

Fluid

Vasopressor

Inotrope

Anti arrhythmic

**NORMOTENSION**

# 2 - OXYGENATION

(SpO<sub>2</sub> < 100 %)

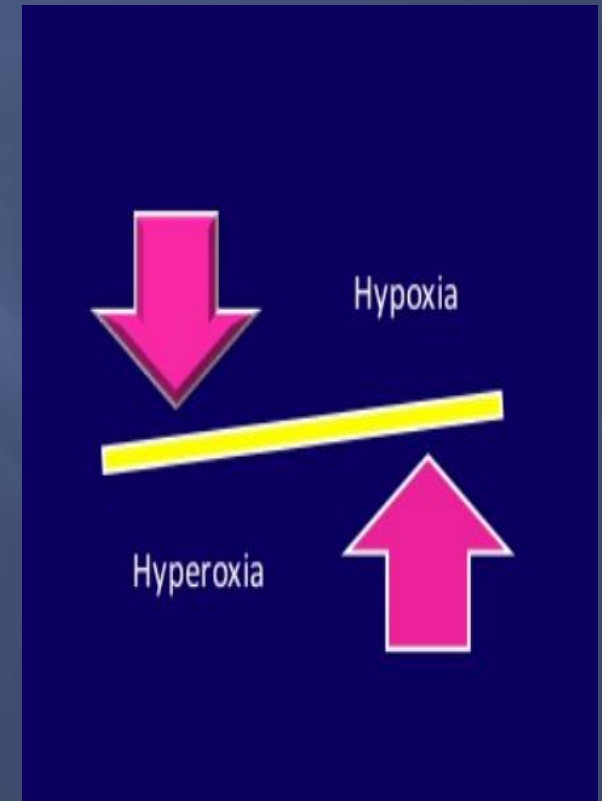
O<sub>2</sub>

Hb / Hct

Ventilation

Circulation

**NORMOXIA**



# 3 – VENTILATION

**M.V = 100%**

↓ ICP & Brain Edema

Correct Acidosis

Remove CO<sub>2</sub> (HCO<sub>3</sub>)

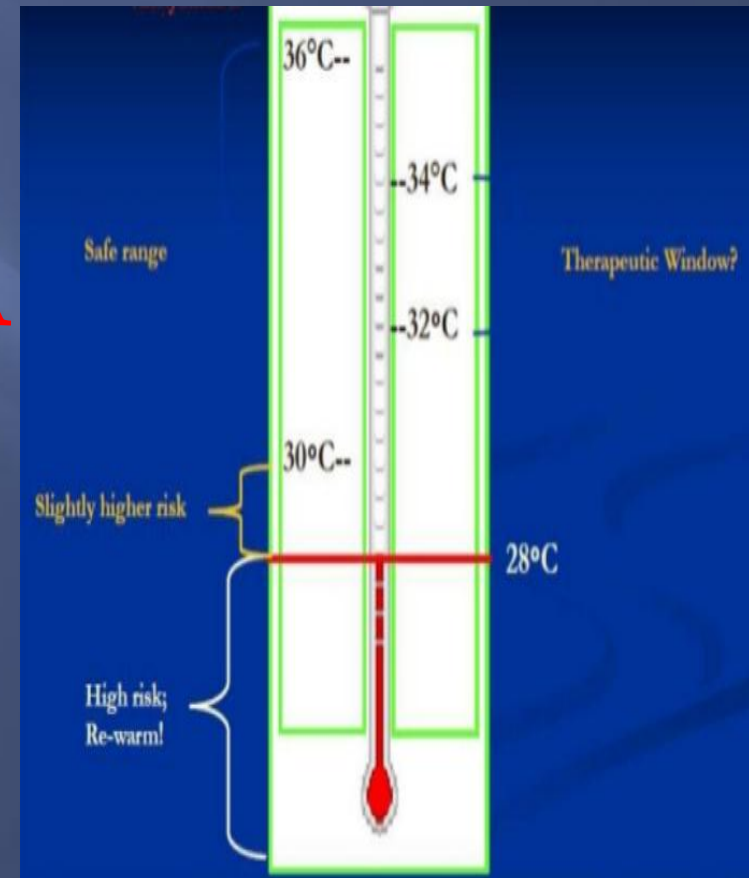
**NORMOVENTILATION**



# 4 – TEMPERATURE

<100 f

**HYPOTHERMIA**



5 – Urine Out put

100 ml / h

# 6 – Blood Glucose

**$\geq 100$  mg / dl**

# Prolonged Life Support

**7 – Sedation / Paralysis & Anticonvulsant**

**8 – Corticosteroid**

**9 – Metabolite demands**

**10-Physical Injury**

**11 – SPECIFIC THERAPY**

**Memb stabilizer/anti free radical**