

Common Rapid Response Team Interventions

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This Presentation is Approved for
1 CRCE Credit Hour



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Learning Objectives

- Explain treatment options for common medical emergencies encountered by Rapid Response Teams.

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History

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1990s

- Australia
- United Kingdom
- Pittsburgh, PA

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Example Rapid Response Activation Criteria

- Heart rate over 140/min or less than 40/min
- Respiratory rate over 28/min or less than 8/min
- Systolic blood pressure greater than 180 mmHg or less than 90 mmHg
- Oxygen saturation less than 90% despite supplementation
- Acute change in mental status
- Marked decrease in urine output
- Staff member has significant concern about the patient's condition

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Additional Reasons to Activate the Team

- Persistent or concerning chest pain
- Threatened airway
- Seizure
- Severe or rapidly worsening pain

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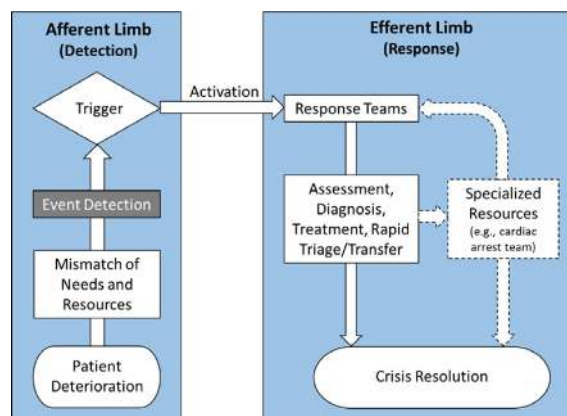
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Rapid Response System

- **Afferent – Activation**
- **Efferent – Responding Team**
- **Quality Improvement**
- **Administrative**



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Rapid Response Teams

- Medical Emergency Team (MET)
- Rapid Response Team (RRT)
- RAT

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NEWS2 Score Chart

National Early Warning Score 2

A simple tool to identify patients at risk of clinical deterioration.

Physiological Parameter	3	2	1	0	1	2	3
Respiratory rate (breaths/min)	≤ 8		9 – 11	12 – 20		21 – 24	≥ 25
SpO ₂ (%) Scale 1*	≤ 91	92 – 93	94 – 95	≥ 96			
Supplemental oxygen		Yes = 2		No = 0			
Systolic blood pressure (mmHg)	≤ 90	91 – 100	101 – 110	111 – 219			≥ 220
Pulse (beats/min)	≤ 40		41 – 50	51 – 90	91 – 110	111 – 130	≥ 131
Temperature (°C)	≤ 35.0		35.1 – 36.0	36.1 – 38.0	38.1 – 39.0	≥ 39.1	
Consciousness level				Alert			New confusion or V, P, U

Interpretation of Total NEWS2 Score

0 – 4	Low clinical risk Continue routine monitoring
5 – 6	Medium clinical risk Increased frequency of observations and clinical review
≥ 7	High clinical risk Urgent clinical review – consider rapid response team

Important Points

- A score of 3 in any single parameter should prompt clinical review, even if the total score is low.
- Use SpO₂ Scale 2 for patients with a prescribed target saturation of 88–92% (e.g., confirmed hypercapnic respiratory failure).
- NEWS2 is a screening tool. Always consider the whole clinical picture.

SpO₂ Scale 2 (for patients with target SpO₂ 88–92%)

3	≤ 83
2	84 – 85
1	86 – 87 or 93 – 94
0	88 – 92
1	≥ 95

Early recognition saves lives.

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Common Medical Emergencies

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Respiratory Distress

- Increased respiratory rate
- Increased WOB
- Desaturation

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Respiratory Distress

- Check SpO₂ / consider ABG
- Stimulate
- Reposition/Open Airway
- Ventilate
- Oxygenate
- Reversal Agents When Indicated
- Intubate

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Respiratory Distress – Non-Functional Airway

- Foreign body aspiration
- Angioedema
- Bleeding
- Stridor / Anaphylaxis

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Respiratory Distress – Other Causes of Hypoxemia

- Pulmonary Embolism
- Shunting

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Respiratory Distress – Low Oxygen-Carrying Capacity

- Bleeding
- Hemolysis (destruction)
- Blood Loss / Consumption
- Hemoglobin Abnormalities

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Respiratory Distress – Reduced Oxygen Delivery: Low Cardiac Output

- Acidosis
- M.I.
- Decreased contractility
- Medications
- Low volume
- Increased intrathoracic pressure
- Bradycardia

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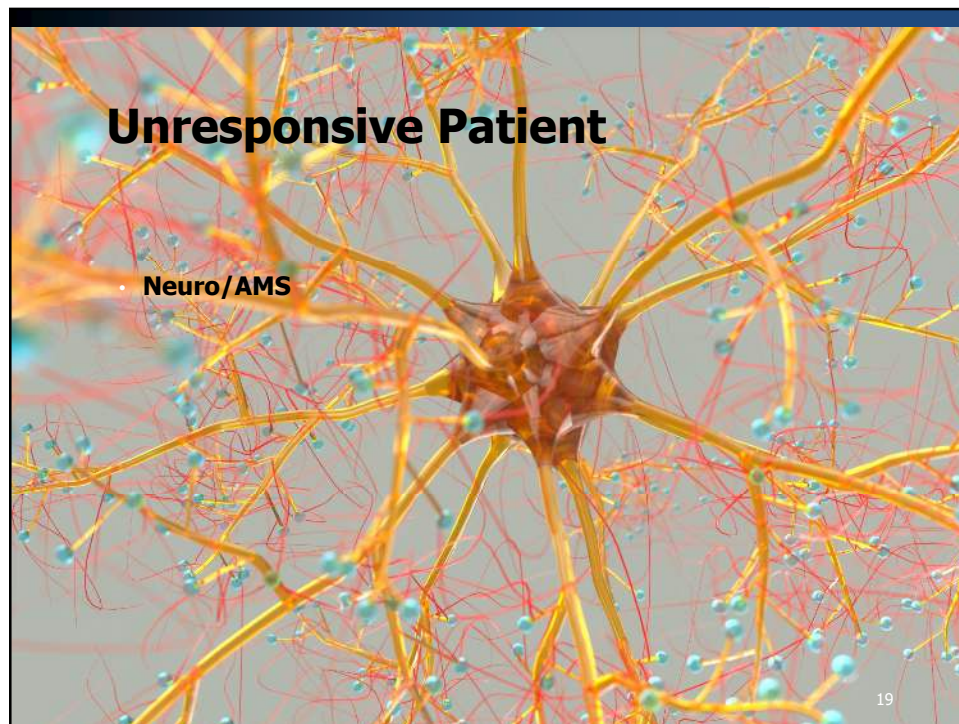
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Respiratory Distress – Reduced Perfusion: Low Systemic Vascular Resistance

- Sepsis
- Pancreatitis
- Liver Disease
- Medications

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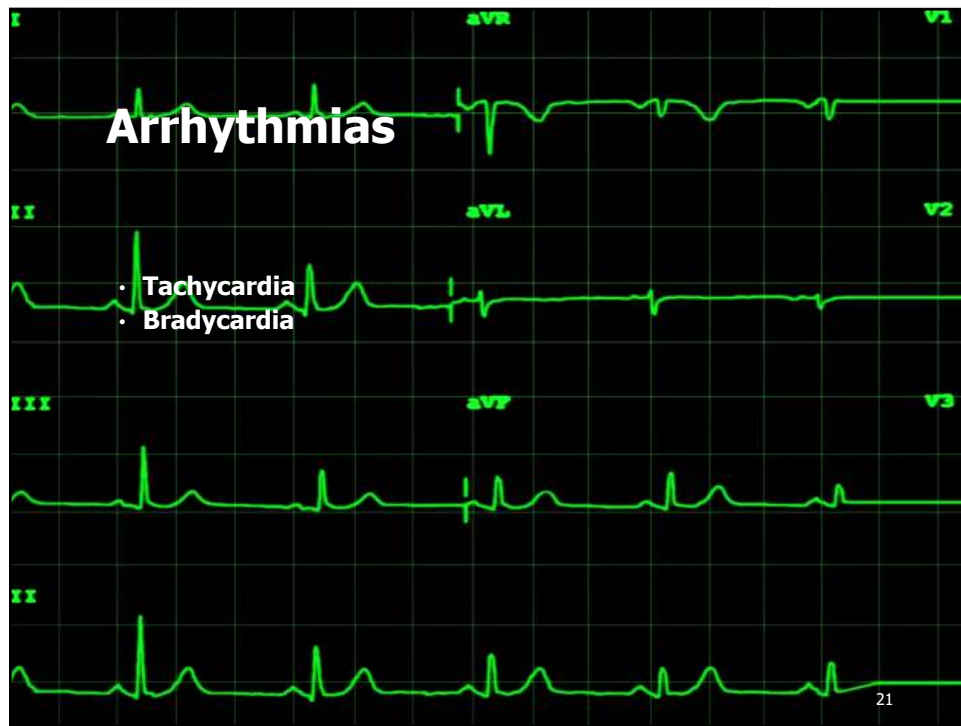
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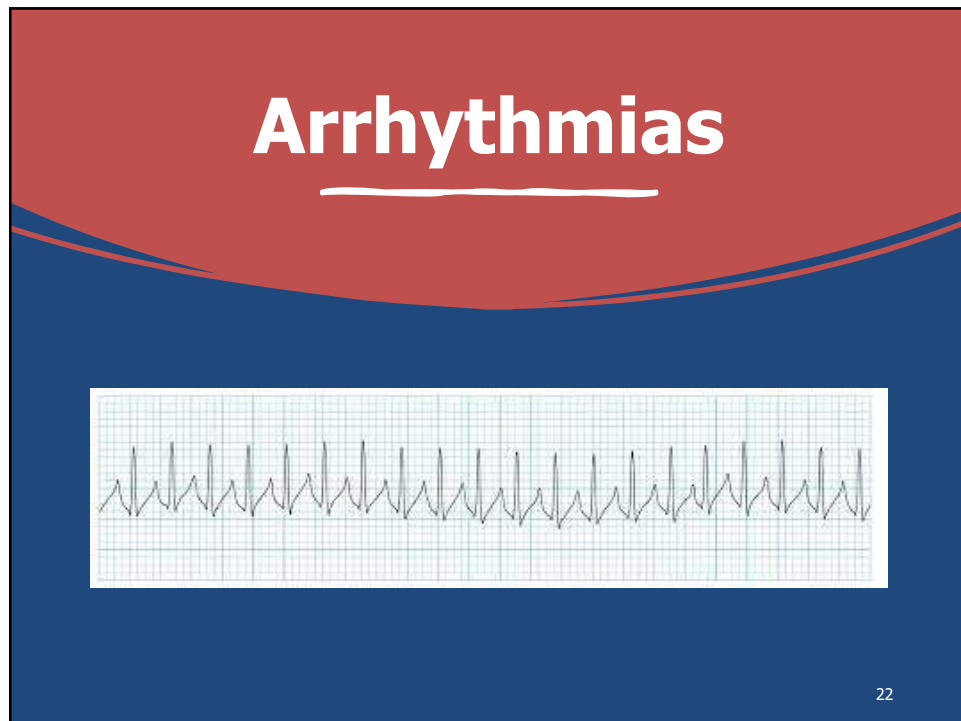
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Arrhythmias



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Arrhythmias



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Arrhythmias



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Shock

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Categories

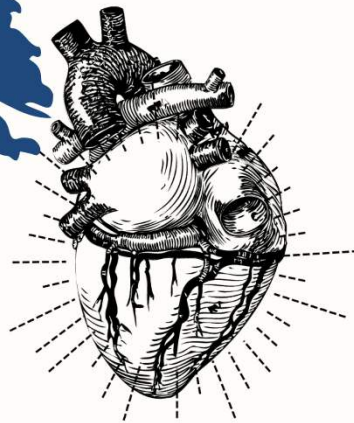
- Hypovolemic
- Distributive
- Cardiogenic
- Obstructive

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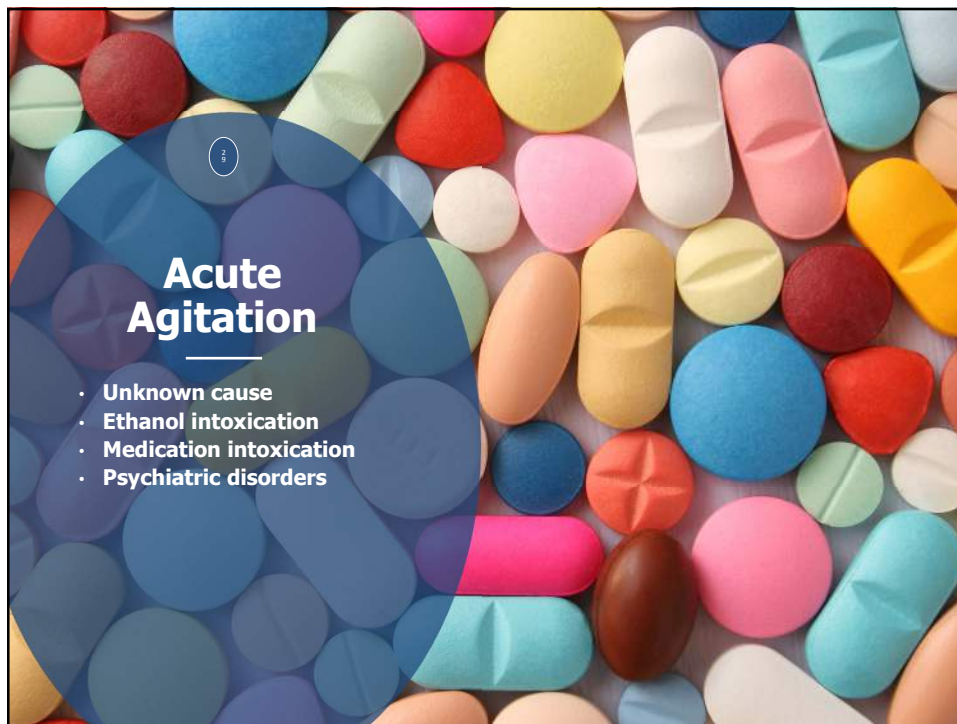
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Respiratory/Cardiac Arrest

- ACLS
- Hs & Ts



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Opioid Overdose

- Life threatening
- Non-Life Threatening
- Long acting



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Hypertensive Emergency

- Ischemic Stroke
- Hemorrhagic Stroke
- Head Trauma
- Encephalopathy
- Acute Heart Failure
- ACS
- Acute Aortic Dissection
- Pregnancy / Preeclampsia

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Hypoglycemia ADA Classification



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Hypoglycemia CNS Signs

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Hyperkalemia

- $K^+ \geq 6.5$ mEq/L or significant ECG changes
- Flattened P waves
- Widened QRS
- Peaked T waves
- Muscle weakness
- Paralysis

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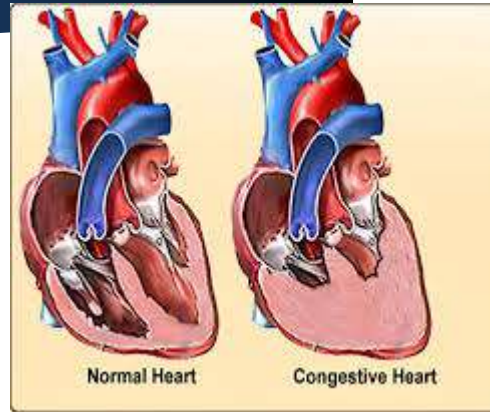
Hyperkalemia

- IV Calcium if ECG Changes
- Insulin + Dextrose
- Nebulized Albuterol
- Remove K^+ / Dialysis if Needed

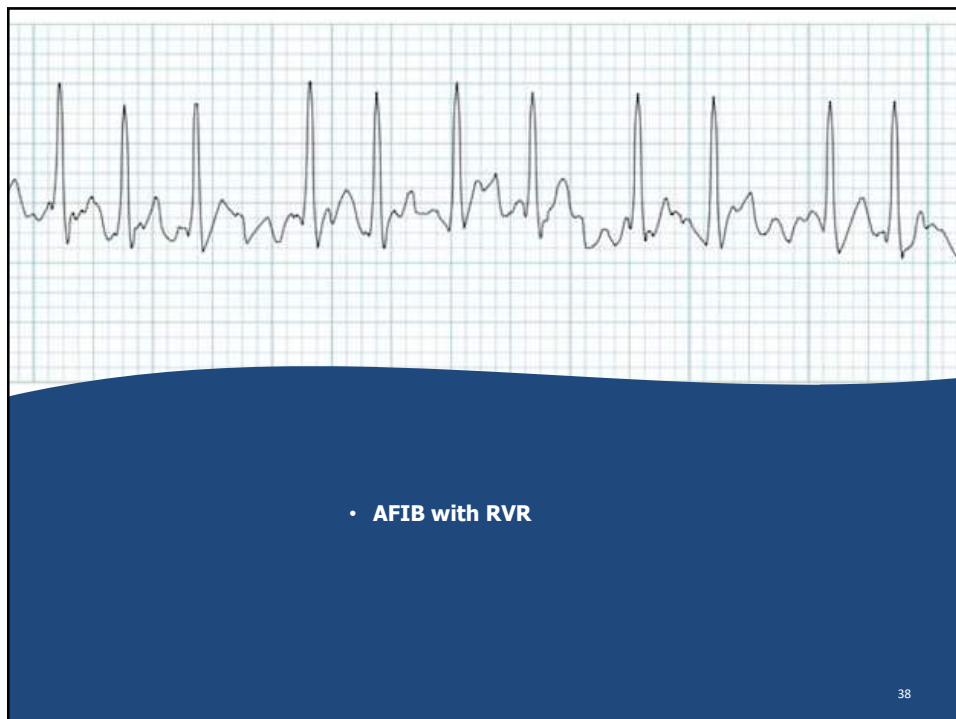
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Acute Decompensated Heart Failure



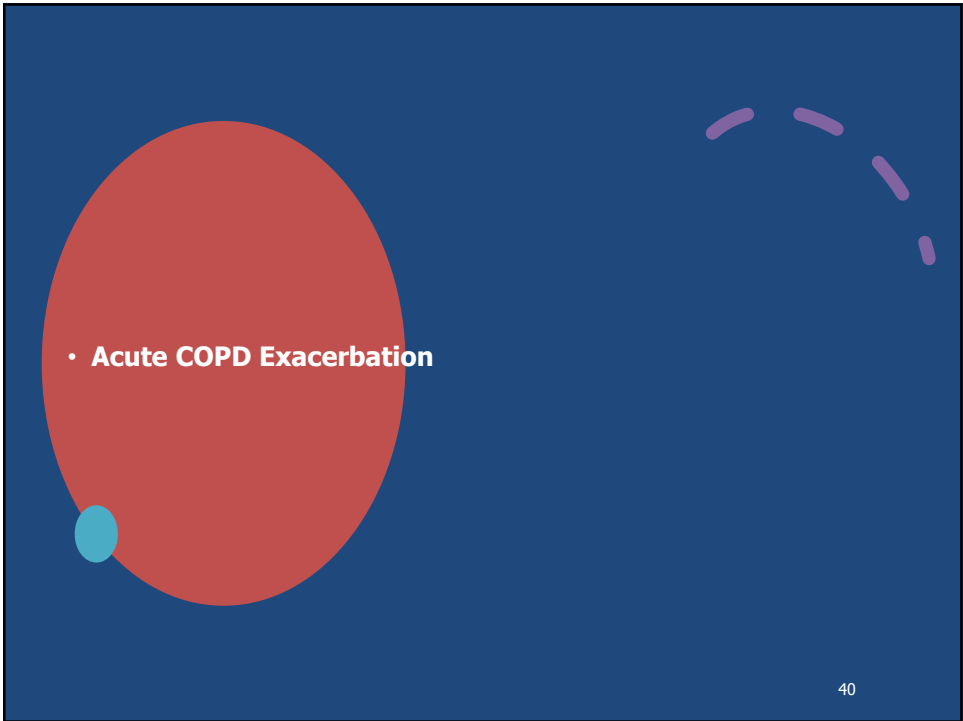
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- Accidental Tracheostomy Decannulation



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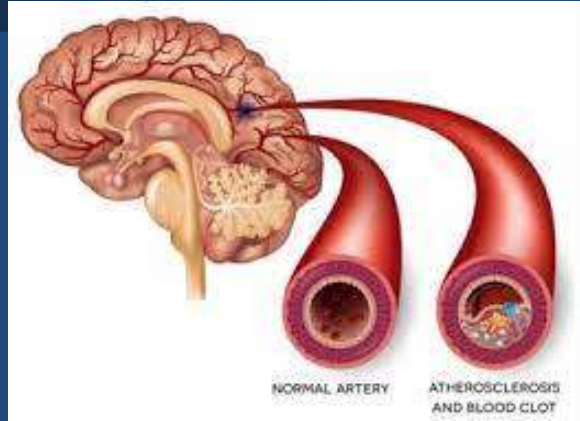
- Life-Threatening Hemoptysis



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Acute Ischemic Stroke



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Summary & Review



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The End



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