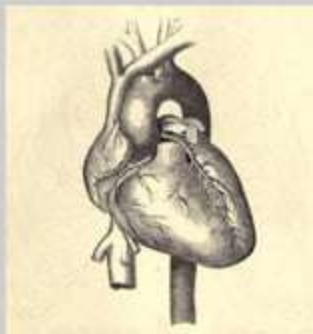


SHOCK



INTRODUCTION

Shock is a state of inadequate tissue perfusion of vital organ. It results in decreased oxygenation at the cellular level and cellular metabolism is inadequate, metabolic waste accumulate in the cell, if condition is not treated.



DEFINITION

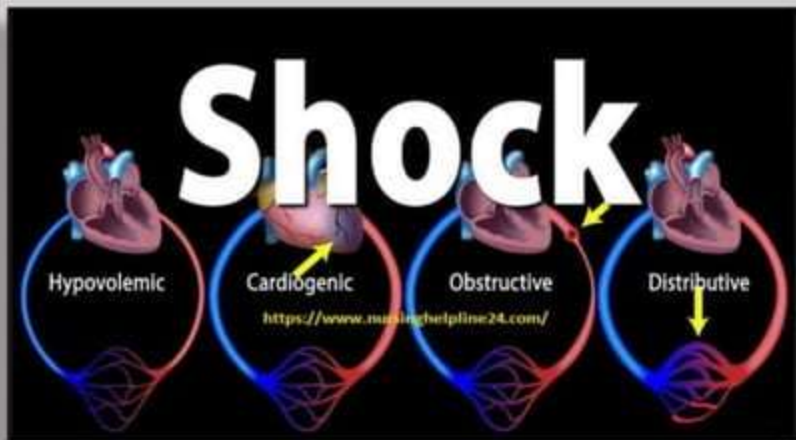
Shock is defined as a condition where the tissues in the body don't receive enough oxygen and nutrients to allow the cells to function.



INCIDENCE

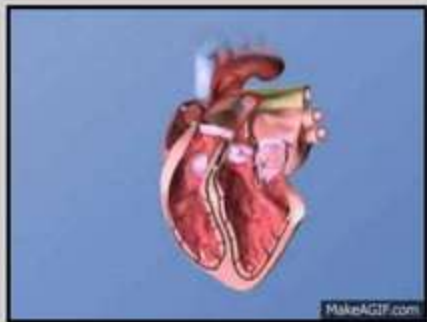
The incidence of shock was 74.8% during cooling and 78.0% during rewarming.

CLASSIFICATION



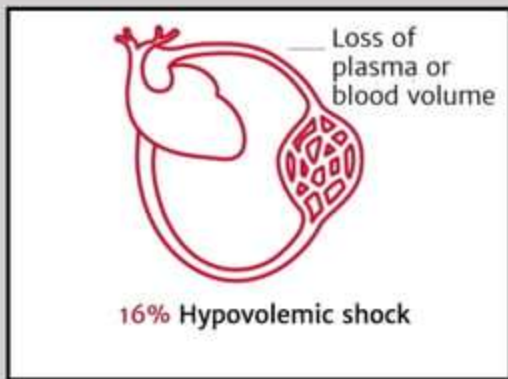
1. Cardiogenic shock

It occurs due to systolic or diastolic dysfunction



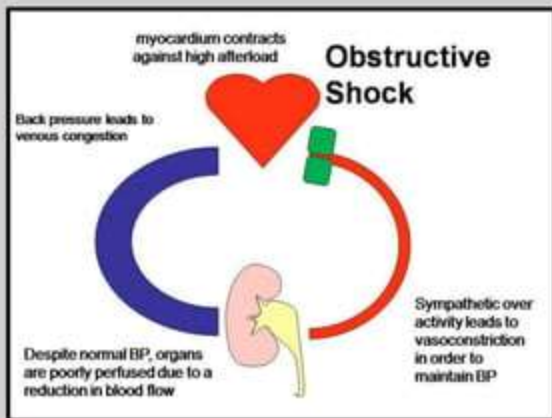
2. Hypovolemic shock

It occurs due to intravascular fluid volume.



3. Obstructive shock

It occurs when there is physical obstruction in blood flow.



4. Distributive shock

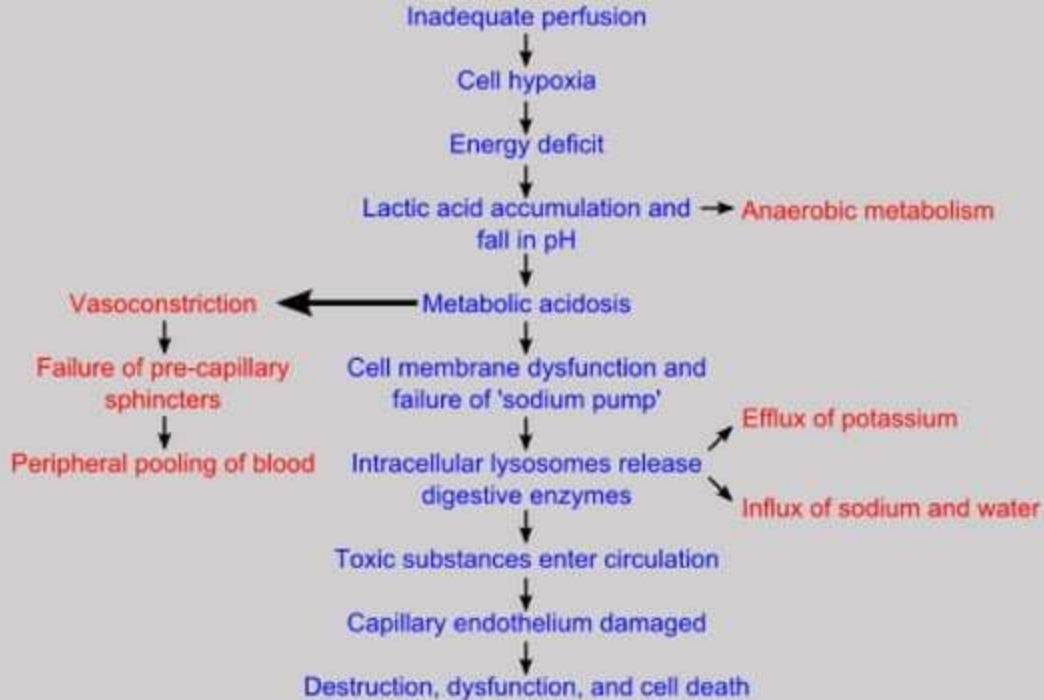
- (neurogenic, anaphylactic & septic)
- Neurogenic shock- It occurs from trauma that leads to spinal cord injuries.
- Anaphylactic shock- It is acute life threatening hypersensitivity reaction to a sensitizing substance like drug, chemical, vaccine, food etc.
- Septic shock- Also known as blood poisoning, is a condition caused by infections that lead to bacteria entering blood.

ETIOLOGY

- ✓ Severe allergic reaction
- ✓ Significant blood loss
- ✓ Heart failure
- ✓ Blood infections
- ✓ Dehydration
- ✓ Poisoning
- ✓ Burns



PATHOPHYSIOLOGY



CLINICAL MANIFESTATIONS

- Extremely low blood pressure
- Weakness
- Chest pain
- Weak pulse
- Profuse sweating



CONTI...

- Dizziness
- Moist, clammy skin
- Unconsciousness
- Rapid, shallow breathing
- Feeling anxious, agitated or confused
- Cyanosis

STAGES OF SHOCK

- 1) *An initial non progressive stage* during which reflex compensatory mechanisms are activated and vital organ perfusion is maintained
- 2) *A progressive stage*: characterized by tissue hypo-perfusion and onset of worsening circulatory and metabolic derangement, including acidosis
- 3) *An irreversible stage*: in which cellular and tissue injury is so severe that even if the hemodynamic defects are corrected, survival is not possible

Diagnostic evaluation

- History collection
- Physical examination
- Blood culture & sensitivity test
- CBC- increased WBC & ESR level
- Arterial blood gas analysis- respiratory alkalosis



Conti...

- ECG - dysarrhythmias
- Echocardiogram .to rule out aortic stenosis and pulmonary embolism.
- X-ray & CT scan
- Cardiac monitoring .Spo2,pulse,temp,BP are monitored continuously.
- Central venous pressure -fluid loss.

MANAGEMENT OF
SHOCK



MEDICAL MANAGEMENT

- GOAL

1. To reduce signs and symptoms.
2. To improve the airway circulation

A. PHARMACOLOGICAL MANAGEMENT

- Inotropic agents: like dopamine , dobutamine and epinephrine
- Vasodilators : nitroglycerine
- Diuretics : lasilactone , furosemide
- Antibiotics : ciprofloxacin, amoxicillin and clavulanic acid



CONTI...

- Antihistamines , epinephrine used in anaphylactic shock.
- Corticosteroids , dexamethasone
- Sodium bicarbonate ,used to treat metabolic acidosis
- Bronchodilators , like atropine , aminophylline etc.



CONTI...

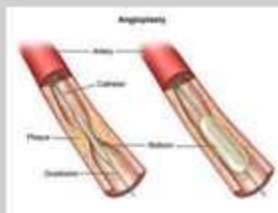
B. NON- PHARMACOLOGICAL MANAGEMENT

- Assessment of vital signs
- Oxygen administration
- Parenteral nutrition support



SURGICAL MANAGEMENT

- ✓ Wound debridement- in case of chronic infected wound, burns wound debridement to be done for fast healing
- ✓ Angioplasty - in case of myocardial infarction angioplasty can be performed
- ✓ Tracheostomy- A tracheostomy is a surgical opening in the anterior wall of the trachea



NURSING MANAGEMENT

➤ ASSESSMENT

- ✓ Continuous monitoring of vital signs should be done.
- ✓ Assess Airway, breathing & circulation of the patient.
- ✓ Monitor for ABG value
- ✓ Check for urine output of the client.



➤ NURSING DIAGNOSIS

1. Acute pain related to ischemic tissues secondary to blockage or narrowing of coronary arteries.
2. Decreased cardiac output related to changes in myocardial contractility/inotropic changes
3. Ineffective tissue perfusion related to reduction of blood flow.
4. Impaired gas exchange related to ventilation perfusion imbalance.
5. Activity intolerance related to imbalance between the oxygen supply and needs.

➤ NURSING INTERVENTION

- Provide proper positioning to the patient , raise the person leg 8-12 inches, this will help to the patient to increase blood flow to the heart.
- Assess with weight and vital signs ;Monitor daily weight for sudden decreases or not , and also maintain normal blood pressure , temperature and pulse
- Administration of fluid ; to maintain the fluid volume in the body
- Proper oxygen administration ; oxygen is administered to increase the amount of oxygen carried by available hemoglobin in the blood
- Administration of medication such as analgesics , bronchodilators, diuretics.

HEALTH EDUCATION

- Adopt 'Heart healthy lifestyle'
- Take healthy diet - Low in sodium & fat
- Control hypertension and diabetes
- Reduce obesity- Be physically active
- Quit smoking
- If lifestyle changes are not enough, Take all of your medicines as prescribed.



COMPLICATIONS

- ❖ Loss of consciousness
- ❖ Respiratory failure
- ❖ Coagulation disorder
- ❖ Multi organ damage
- ❖ Coma
- ❖ Death



CONCLUSION

shock happens when not enough blood and oxygen can get to your organs and tissues. It causes very low blood pressure and may be life threatening. It often happens along with a serious injury.

**THANK
YOU!**