Shock is obstetrics

MRS.AMUDHA

ASSO.PROF

ICON

INTRODUCTION

- Shock is obstetrics; occurs most frequently during the third stage of labour, and usually associated with haemorrhage. When blood loss is rapid and severe, the situation becomes extremely serious if not treated promptly, an irreversible stage of shock is reached from which the women may not recover even after the transfusion of blood.

DEFINITION

- Shock is a condition resulting from inability of the circulatory system to provide the tissues requirements from oxygen and nutrients and to remove metabolites.

-D.C.Dutta

TYPES

1. HAEMORRHAGIC SHOCK
2. NEUROGENIC SHOCK
3. CARDIOGENIC SHOCK
4. ENDOTOXIC SHOCK
5. ANAPHYLACTIC SHOCK

OTHER CAUSES

- EMBOLISM (amniotic fluid , air or thrombus)
- INCOMPLETE ABORTION (haemorrhagic and endotoxic shock)
- DISTURBED ECTOPIC AND RUPTURE UTERUS (haemorrhagic and neurogenic shock)

CLINICAL PICTURE

HAEMORRHAGIC SHOCK

Classification

- class 1
- class 2
- class 3

PHASES OF HAEMORRHAGIC SHOCK

- The normal pregnant women can withstand blood loss of 500 ml and even up to 1000 ml during delivery without obvious danger due to physiological cardiovascular and haematological adaptations during pregnancy.

Phase of compensation

sympathetic stimulation:

- It is initial response to blood loss leading to peripheral vasoconstriction to maintain blood supply to the vital organs.

clinical picture:

- pallor, tachycardia, tachypnoea.

Phase of decompensation

- Blood loss exceeds 1000 ml in normal patient or less if other adverse factors are operating.
- **Clinical picture** : is the classic clinical picture of shock.

MANAGEMENT

- Establish an airway and give oxygen by mask or endotracheal tube.
- Elevate the legs to encourage return of blood from the limbs to the central circulation.
- Two or more intravenous ways are established for blood, fluids and drugs infusion which should be given by IV route in shocked patient.
- If the veins are difficult to find a venous cut down or intrafemoral canulation is done.

RESTORATION OF BLOOD VOLUME

- Whole blood: cross-matched from the same group if not available group o-ve may be given as a life-saving.
- Crystalloid solutions: as ringer lactate, normal saline or glucose 5%.

DRUG THERAPY

- Analgesics: 10-15 mg morphine IV if there is pain, tissue damage or irritability.
- Corticosteroids: hydrocortisone 1gm or dexamethasone 20mg slowly IV. Its mode of action is controversial.
- Sodium bicarbonate: 100meq IV if metabolic acidosis is demonstrated.

Cont....

- Vasopressors: to increase the blood pressure so maintain renal perfusion.
- Dopamine: 2.5 mg/kg/ minute IV is the drug of choice.
- Beta adrenergic stimulant: isoprenaline 1mg in 500ml 5% glucose slowly IV infusion.

MONITORING

- Central venous pressure: normal 10-12cm water.
- Pulse rate
- Blood pressure
- Urine output: normal 60ml/hour.
- Pulmonary capillary wedge pressure: normal 6-18 torr.
- Clinical improvement in the : pallor, cyanosis, air hunger, sweating and consciousness.

COMPLICATION

1. Acute renal failure
2. Pituitary necrosis (sheehan's syndrome)
3. Disseminated intravascular coagulation.

ENDOTOXIC SHOCK

- Obstetric causes:
- Septic abortion
- Prolonged rupture of membranes
- trauma
- Retained placental tissues
- Puerperal sepsis
- Severe acute pyelonephritis

CLINICAL FEATURES

DIAGNOSIS

- Amniotic fluid embolism
- Pulmonary embolism
- Pulmonary aspiration syndrome
- Myocardial infarction
- Blood transfusion

MANAGEMENT

1. Restoration of circulatory function and oxygenation:

- Corticostroids:

  - hydrocortisone 1 gm IV/6 hours or

  - dexamethasone 20 mg initially followed by

    200 mg/ day by IV infusion.

Cont....

- Beta adrenergic stimulant: as isoprenaline cause arteriolar dilatation, increase heart rate and stroke volume improving tissue perfusion.
- Oxygen: if respiratory function is impaired.
- Aminophylline: improves respiratory function by alleviating bronchospasm

Cont.....

2. Eradication therapy:

- Swabs for culture and sensitivity are taken first.
- Antibiotic therapy is starting immediately till the result of culture and given by IV route.

SUMMARY

- So far we have discussed about the introduction, definition, types, causes, clinical picture, haemorrhagic shock, endotoxic shock.

BIBLIOGRAPHY

1. A textbook of midwifery and obstetrical nursing, nima bhaskar, second edition.

2. A textbook of midwifery for nurses, marie elizabeth, second edition.

3. A textbook of midwifery and obstetrics, dr. shally magon, sanju sira, third edition.

4. “D.c dutta”, a textbook of gynaecology including contraception, fourth edition.

ANY DOUBT


Thank
You