Course Code: BSCN4001

Course Name: Midwifery and obstetrical nursing

HYPEREMESIS GRAVIDARUM

GALGOTIAS UNIVERSITY

Course Code: BSCN4001

Course Name: Midwifery and obstetrical nursing

Contents:

- Introduction
- Aetiology & Proposed theories
- Clinical course
- Investigations and management

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Introduction

Vomiting is a symptom which may be related to pregnancy or may be a manifestation of some medical-surgical-gynecological complications, which can occur at any time during pregnancy.

Depending upon the severity, vomiting related to pregnant state is classified as:

- Simple vomiting of pregnancy or milder type
- Hyperemesis gravidarum or severe type

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Simple vomiting (morning sickness, emesis gravidarum)

- □ Patient complains of nausea and occasional sickness on rising in the morning.
- □Slight vomiting is so common in early pregnancy (about 50%)
- May occur at other times of day
- □Does not produce any impairment of health or restrict the normal activities of the women
- ☐ Features disappears with or without treatment by 12-14th week of pregnancy

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Hyperemesis gravidarum

Excessive vomiting of pregnancy incapacitating the day to day activities and/or deteriorating the health of the mother is called hyperemesis gravidarum



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Incidence

Marked fall in incidence

Now a rarity in hospital practice (less than 1 in 1000 pregnancies)

Reasons are:

- Better application of family planning knowledge reduces the number of unplanned pregnancies
- Early visit to antenatal clinic
- Potent antihistaminic, antiemetic drugs

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Etiology

The etiology is obscure but the following are the known facts:

- Mostly limited to first trimester
- More common in first pregnancy, with tendency of recur again in subsequent pregnancies
- Has got a familial history
- ☐Young age, Low body mass, Motion sickness or migrane
- More prevalent in hydatidiform mole and multiple pregnancy
- ■More common in unplanned pregnancies

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Clinical course

Early

- Vomiting occurs throughout the day
- ■There is no evidence of dehydration or starvation

Late

- ■Vomiting is increased in frequency with retching
- Oliguria
- Epigastric pain
- Constipation

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Signs:

Features of dehydration and ketoacidosis:

- ✓ Dry coated tongue
- ✓ Sunken eyes
- ✓ Acetone smell to breath
- ✓ Tachycardia
- √ Hypotension
- √ Rise in temperature
- Also, Oiguria, epigastric pain, constipation

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Investigations: Urinalysis:

- ✓ Quantity
- ✓ Dark colour
- ✓ High specific gravity with acid reaction
- ✓ Presence of acetone, occasional presence of protein and bile pigments

☐ Thyroid function and Electrolytes

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Biochemical and circulatory changes:

Ophthalmoscopic examination:

- ✓ Retinal hemorrhage
- ✓ Detachment of retina

ECG:

✓ Abnormal serum potassium level

USG

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Complications:

Neurologic complication:

oWernicke's encephalopathy is an acute neurological condition characterized by a clinical triad of ophthalmoparesis with nystagmus, ataxia, and confusion. This is a life-threatening illness caused by thiamine deficiency, which primarily affects the peripheral and central nervous systems.

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- oPontine myelinolysis (PM) is a neurological disorder represented by demyelination of the **Pons**. It is corrected by treatment of hyponatremia
- oPeripheral neuritis or neuropathy, is a result of damage to the nerves outside of the brain and spinal cord (peripheral nerves)
- oKorsakoff's psychosis is a late complication of persistent Wernicke encephalopathy and results in memory deficits, confusion, and behavioral changes

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Stress ulcer in stomach

Esophageal tear (Mallory – Weiss syndrome)

Jaundice

Convulsion

Coma

Renal failure

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Management

The principles in the management:

To correct vomiting

To correct the fluids and electrolytes imbalance

To correct metabolic disturbances (acidosis and alkalosis)

To prevent the serious complications of severe vomiting

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Hospitalization:

Admitted with the same diet and drugs used at home, the patient improves rapidly

Fluids

Oral feeding is withheld for at least 24 hours after the cessation of vomiting. During this period, fluid is given through i.v. drip method.

The amount of fluid to be infused in 24 hours is calculated as: total amount of fluid approx. 3 litres, of which half is 5% is dextrose and half is Ringer's solution

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Drugs

- □ Antiemetic drugs Promethazine 25mg or Prochlorperazine 5mg or Trifluopromazine 10mg may be administered twice or thrice daily intramuscularly.
- Vitamin B6 and Doxylamine are also safe and effective
- ☐ Hydrocortisone 100mg IV in the drip is given in case with hypotension or intractable vomiting.
- Oral method Prednisolone is also used in severe cases.

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•Nutritional support: with vitamin B1,B6,C and B12 are given

Nursing care

Sympathetic and firm handling of the patient is essential

Social and psychological support should be extended

- □Before the IV fluid is omitted, the foods are given orally. At first ,dry carbohydrate foods like biscuits, bread and toast are given.
- □Small but frequent feeds are recommended.
- ☐ Gradually full diet is restored

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Hyper emesis progress chart: vitals, urine output, electrolytes

Improvement:

- 1. Subsidence of vomiting
- 2. Feeling of hunger
- 3. Better look
- 4. Normalization of biochemistry
- 5. Disappearance of acetone from breath and urine
- 6. Normal pulse and blood pressure
- 7. Normal urine output

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