



# **Vomiting In Pregnancy**

#### Learning Objectives:

- By the end of this subject, the student will be able to:
- -List differential diagnosis of vomiting during pregnancy.
- Define Morning Sickness & identify its incidence & fate.
- -Define Hyperemesis gravidarum, identify its etiology, pathology, symptoms and signs, describe the different investigations & outline its management.

# Etiology

## I-Pregnancy-Induced:

- 1- Emesis gravidarum
- 2- Hyperemesis gravidarum.
- 3- Molar pregnancy
- 4- Acute polyhydramnios (e.g. Monozygotic twins)
- 5- Severe PET

## Etiology (contin.)

## II-Pregnancy-Aggravated:

- 1-Acute Pyelo-nephritis
- 2-Peptic Ulcer.
- 3-Hiatus Hernia
- 4-Acute on top of chronic cholecystitis.
- 5-Torsion of an ovarian cyst
- 6-Acute hepatic cell failure.

# Etiology (contin.)

## III-Associating:

- A-Medical: 1- Gastro-enteritis
  - 2- Uremia
- B-Surgical: 1- Acute intestinal obstruction
  - 2- Acute appendicitis.

## Morning Sickness

#### **Definition:**

Nausea with or without vomiting, usually in the early morning, not affecting the general condition, usually responds to just assurance, but sometimes needs simple anti-emetics.

<u>Incidence</u>:- >50% of pregnant women.

Onset: may be before the 1st missed period.

Fate:-usually passes off by 12-14 weeks.

## Hyperemesis Gravidarum

#### **Definition:**

Nausea and vomiting, not restricted to the early morning, affecting the general condition, needs special management.

Incidence: 2‰

#### **Etiology:** Theories

- 1-Hypersensitivity to hCG: the most accepted; evidenced by:
- \*increased incidence & severity in cases with high hCG as:-molar pregnancy
  -multiple pregnancy.
- 2-Neurosis.
- 3-Adrenocortical insufficiency.
- 4-Vitamin deficiency: B1 & B6

- Pathology: Only in fatal conditions.
  - Resemble starvation.
- A-Brain: Werniche's encephalopathy: brain stem congestion& petechiae
- B-Retina: petechiae
- C-Heart: petechiae
- **D-Liver:** fatty infiltration
- E-Kidney: fatty degeneration of the tubules.
- F-Peripheral nerves: degeneration.

#### Diagnosis: Clinical:

- A-Symptoms: Pregnancy with:
- -History of emesis passing into hyperemesis:
- -Vomiting:
- \* frequent
- \* severe
- \* day &night
- \* may be with empty stomach
- \* may bile or blood stained
- -Thirst.
- -Urine :scanty, concentrated.
- -Constipation.

## **B-Signs**:

-Dehydration:

dry mouth, sunken eyes, weight loss, weak rapid pulse, hypotension, slight rise of temp.,

-Severe cases: Sings of Pathological Complications e.g. jaundice, drowsiness,..etc

## Investigations:

- *-U/S*: to exclude molar pregnancy, multiple pregnancy.
- -Urine analysis:
- ↓ chlorides .
- -Ketonuria: anaerobic metabolism
- -Albuminuria: renal affection.
- -Bile: indicates liver function testing.
- -Liver functions:-indicated on: jaundice, bile in urine.
- -Markers for hepatitis: indicated on high liver enzymes.

#### Treatment:

*I-Prophylactic:* proper management of emesis gravidarum.

II-Psychological:- reassurance

- hospitalization.

#### III-Medical

1-nothing per mouth.

2-Careful observation chart:

-vital signs

-vomiting: frequency, amount, contents.

-urine: amount, Sp.Gr., alb., cl., bile, casts.

# 3-IV replacement therapy: glucose 5%, saline, conc. glucose "on ketonuria"

- 4-Parenteral Medications:
- -Antiemetics.
- -Antihistaminics.
- -Antiacids.
- -Vitamins.
- 5-Gradual oral feeding:-dry food -COH.

## IV-Termination of Pregnancy: Clinical Indications:

1-Persisant severe vomiting after one week of this regimen.

2-Persistant bad vital signs:

-Pulse>100b/m, -BP "systole" <100 mmhg,

-Temp.>38°C.

3-Jaundice.

4-Anuria.

## Laboratory Indications:

- 1-Urine: -bile
  - -persistent proteinurea
  - -absence of cl.
- 2-Renal functions: uremia
- 3-Fundus examination:- Retinal petechiae.