International Journal of Science and Research (IJSR)
ISSN: 2319-7064
SJIF (2022): 7.942

Acute Management of Hyperemesis Gravidarum with Homoeopathic Remedy; An Individual Case Study

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Abstract: ***Background: Worldwide, there are more than 200 million pregnancies each year, with over 40% classified as unintended, though this distinction does not imply they are unwanted. It is essential that every couple has the opportunity to plan and decide when they are prepared for pregnancy. Early prenatal care is crucial for the 40% of unintended pregnancies to mitigate the risks of adverse perinatal outcomes and complications. [1] The fundamental elements for promoting a healthy pregnancy and reproductive health involve addressing preconception health concerns, preparing for pregnancy, initiating early prenatal care, and minimizing risks throughout the perinatal and inter conception periods. [2] Homeopathy is considered an optimal form of treatment for managing symptoms and complications during pregnancy. It has demonstrated effectiveness in alleviating severe conditions such as morning sickness, headaches, digestive issues, muscle aches, and other common discomforts associated with pregnancy. [3] Aim: To determine, whether Homoeopathic medicines can manage the acute manifestations of Hyperemesis Gravidarum. Methods & Materials: Mrs. XYZ, 33 years old female with second gravida at G. A.13 $^{+3}$ weeks, who undergoing regular ANC in registered Obstetrician clinic. Clinical laboratory investigations are urine ketone level and serum electrolytes to evaluate the prognosis, Homoeopathic remedy Symphoricorpus Racemosa 30 C. Result: Excessive vomiting for two weeks duration in second trimester is controlled and urine ketone level also markedly reduced with Homoeopathic medicine Symphoricorpus Racemosa 30 C within two days. Conclusion: Homoeopathic drug Symphoricorpus Racemosa is effective in controlling Hyperemesis Gravidarum with no side effects.***

Keywords: Hyperemesis, pregnancy, urine ketone, Homoeopathy, Symphoricorpus Racemosa.

1. Definition

Hyperemesis gravidarum is defined as severe and persistent vomiting during pregnancy, which can lead to weight loss, dehydration, and the presence of ketones in the urine or blood (ketonuria and/or ketonemia). [4]

Etiology

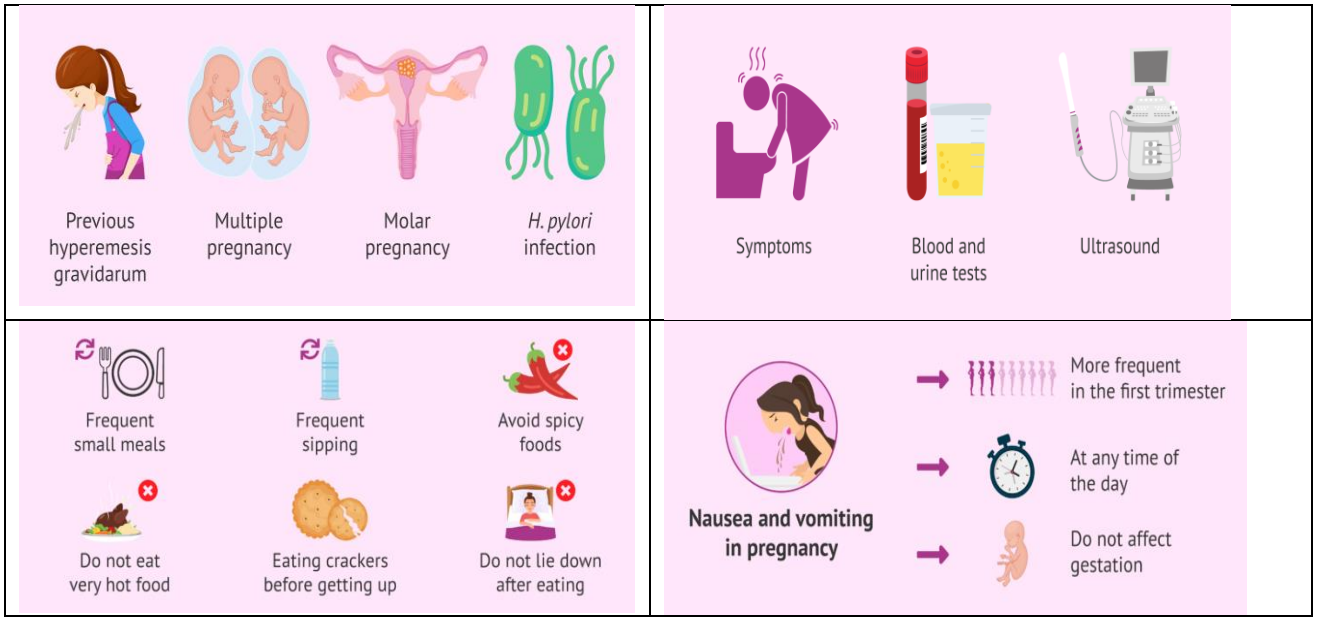
The exact cause of hyperemesis gravidarum remains largely unknown. However, several risk factors have been identified for its development during pregnancy. These include increased placental mass in cases of molar pregnancies or multiple gestations, which are associated with a higher risk. Women who have a history of nausea and vomiting due to estrogen - containing medications or motion sickness, or who have a history of migraines, are also at increased risk. Furthermore, studies indicate a higher likelihood of hyperemesis gravidarum in women with first - degree relatives (such as mothers or sisters) who have experienced the condition. [5]

Pathophysiology

Women with family members who have experienced hyperemesis gravidarum demonstrate an elevated risk of developing the condition themselves. GDF15 and IGFBP7 genes, have been identified as potentially associated with the development of hyperemesis gravidarum. [6]

During pregnancy, it is widely recognized that elevated levels of estrogen and progesterone cause relaxation of the lower esophageal sphincter. This relaxation contributes to a higher frequency of symptoms related to gastroesophageal reflux disease (GERD), one of which is nausea. [6]

Human chorionic gonadotropin (hCG) levels have been associated with this condition. Peak hCG levels occur in the first trimester, which typically aligns with the onset of hyperemesis symptoms. Many studies suggest a link between higher concentrations of hCG & the occurrence of hyperemesis. [7] Levels of estradiol rise early in pregnancy and decline later, which parallels the usual pattern of nausea and vomiting during this time. Furthermore, nausea and vomiting are recognized side effects of medications containing estrogen. [8]



Differential Diagnosis

The diagnosis of hyperemesis gravidarum is clinical and largely a diagnosis of exclusion.

- **Gastrointestinal Conditions:** Gastroenteritis, Gastroparesis, Achalasia, Biliary tract disease, Hepatitis, Intestinal obstruction, Peptic ulcer disease, Pancreatitis, Appendicitis.
- **Genitourinary Conditions:** Pyelonephritis, Uremia, Ovarian torsion, Kidney stones, Degenerating uterine leiomyoma
- **Metabolic Conditions:** Diabetic ketoacidosis, Porphyria, Addison disease, Hyperthyroidism, Hyperparathyroidism
- **Neurologic Disorders:** Pseudotumor cerebri, Vestibular lesions, Migraine headaches, Tumors of the central nervous system, Lymphocytic hypophysitis
- **Miscellaneous Condition:** Drug toxicity or intolerance
- **Psychologic Conditions**
- **Pregnancy - related conditions:** Preeclampsia, HELLP (hemolysis, elevated liver enzymes, and low platelets), and acute fatty liver of pregnancy typically present themselves during the late second or third trimester of pregnancy. [9]

Management in Modern Medicine:

The first step in treatment should involve non - drug interventions, including changing the patient's prenatal vitamins to exclusively folic acid supplementation, using ginger supplements as required (250 mg orally, four times daily), and utilizing acupressure wristbands. [10] If symptoms persist despite initial treatment, the recommended first - line pharmacologic approach involves a combination of vitamin B6 (pyridoxine) and doxylamine. Second - line medications include antihistamines and dopamine antagonists such as:

- Dimenhydrinate, administered orally at 25 to 50 mg every 4 to 6 hours,
- Diphenhydramine, administered orally at 25 to 50 mg every 4 to 6 hours,
- Prochlorperazine, administered rectally at 25 mg every 12 hours, or
- Promethazine, administered orally or rectally at 12.5 to 25 mg every 4 to 6 hours. [10]

If symptoms persist and dehydration is not evident, oral administration of metoclopramide, ondansetron, or promethazine may be considered. In cases of dehydration, intravenous fluid boluses or continuous infusions of normal saline should be administered, along with intravenous metoclopramide, ondansetron, or promethazine. Electrolyte replacement should be administered as necessary. For severe and resistant cases of hyperemesis gravidarum, intravenous or intramuscular chlorpromazine at 25 to 50 mg or oral/intravenous methylprednisolone at 16 mg every 8 hours may be effective. [11]

Homoeopathic Remedies for Hyperemesis

a) Symphoricarpus Racemosa

This drug is highly recommended for the persistent *vomiting of pregnancy*. Gastric disturbances, fickle appetite, nausea, waterbrash, bitter taste. *Constipation*. Nausea during menstruation. Nausea, *worse any motion*. *Averse to all food*. *Better*, lying on back. [12]

b) **Asarum**

This remedy is indicated when a woman feels very ill, with constant nausea and retching. She is extremely sensitive to everything especially noise, which can aggravate the nauseous feelings. She feels best when lying down and resting. Cool drinks or food may help, but it is hard for her to even think of eating.

c) **Kreosotum**

When this remedy is indicated, the woman may salivate so much that she constantly swallows it, becoming nauseous. She may also vomit up food that looks undigested, several hours after eating.

d) **Lacticum acidum**

This remedy is indicated for “classic morning sickness”: nausea worse immediately on waking in the morning and on opening the eyes. The woman may salivate a lot and have burning stomach pain. She usually has a decent appetite and feels better after eating.

e) **Sepia**

Gnawing, intermittent nausea with an empty feeling in the stomach suggests a need for this remedy. It is especially indicated for a woman who is feeling irritable, sad, worn out, and indifferent to her family. She feels

worst in the morning before she eats, but is not improved by eating and may vomit afterward. Nausea can be worse when she is lying on her side. Odors of any kind may aggravate the symptoms.

f) **Tabacum**
This remedy can be helpful to a woman who feels a ghastly nausea with a sinking feeling in the pit of her stomach. She looks extremely pale, feels very cold and faint, and needs to lie very still and keep her eyes closed. If she moves at all, she may vomit violently or break out in cold sweat and feel terrible.

g) **Colchicum**
Horrible nausea that is worse from the sight and smell of food (especially eggs or fish) often indicates this remedy. The woman retches and vomits, and has a sore and bloated feeling in the abdomen. She has trouble eating anything. She is likely to feel ill from many smells that others don't even notice.

h) **Ipecacuanha**
This remedy is indicated for intense and constant nausea that is felt all day (not only in the morning) with retching, belching, and excessive salivation. The woman may feel worse from lying down, but also worse from motion. Even after the woman vomits, she remains nauseous.

i) **Nux vomica**
Nausea, especially in the morning and after eating, may respond to this remedy—especially if the woman is irritable, impatient, and chilly. She may retch a lot and have the urge to vomit, often without success. Her stomach feels sensitive and crampy, and she may be constipated.

j) **Pulsatilla**
This remedy can be helpful if nausea is worse in the afternoon and evening. The woman is not very thirsty, although she may feel better from drinking something cool. She can crave many different foods, but feels sick from many things. Creamy foods or desserts may be appealing, but can cause discomfort and burping or bring on vomiting. [13]

Prognosis
Nausea and vomiting are frequent occurrences during pregnancy, typically starting before the 9th week of gestation, with most cases resolving by the 20th week. However, about 3 percent of women continue to experience vomiting into the third trimester. Approximately 10 percent of those diagnosed with hyperemesis gravidarum will endure symptoms throughout their entire pregnancy. [14]

2. Complications

Maternal Complications
Severe cases of hyperemesis gravidarum can lead to several complications if not managed effectively, including vitamin deficiency, dehydration, and malnutrition. Vitamin B1 deficiency can result in Wernicke encephalopathy, a condition that, if untreated, can lead to death or permanent disability. Furthermore, there have been documented cases where forceful and frequent vomiting resulted in injuries such as esophageal rupture and pneumothorax. Electrolyte imbalances, such as hypokalemia, can also pose significant risks to health and life. Moreover, individuals with hyperemesis gravidarum may experience higher rates of depression and anxiety during. [15]

Fetal Complications
Research findings on the relationship between nausea and vomiting in pregnancy, including hyperemesis gravidarum and birth outcomes such as low birth weight and premature delivery are varied However, despite these variations, studies consistently indicate that hyperemesis gravidarum is not associated with increased perinatal or neonatal mortality Additionally, there does not appear to be an elevated frequency of congenital anomalies in patients affected by hyperemesis Gravidarum. [16]

3. Case Report

Presenting Complaints:
On 12th January 2024, Mrs. XYZ, 26 years old female, from Attoor, Kanniyakumari Dt., working as a tailor, belonging to low socio - economic status, came with the complaints of tiredness, nausea & vomiting since 10 days.

History of present illness:
Known case of second gravida at gestational age of 13^{+3} weeks, obstetric score is $G_2P_1L_1$. She was suffering from tiredness, nausea, vomiting since 10 days which is not relieved by Modern medicine. Vomiting 9 - 10 episodes per day. Similar complaints occurred one month ago. Appetite & thirst was reduced due to fear of vomiting. Difficulty in passing stool on & off. Patient wants to lie down calmly that gives temporary relief. History of regular Ante Natal check - up is going on in nearby Obstetrician Clinic. History of Obstetric U/S (Early Scan) shown single live intra uterine gestation with G. A of 12 weeks. Tongue is dry with bitter taste.

Treatment History:
History of allopathic treatment taken but recurrence was there.

Past History:
History of Appendicectomy surgery done at the age of 19 years old.
History of suffering from Hyperemesis during first pregnancy 5 years ago.

Family History:
Similar history was found to her mother also.
Mother is suffering from Bronchial Asthma on treatment.
Father is suffering from Acid Peptic Disorder & Systemic Hypertension.

Personal History:
Takes mixed diet, normal habituation, no addictions.

Mental Generals:
Anxiety about her complaints and worries that miscarriage would happen.

Physical Generals:

Functions	Eliminations
Desire – refreshing juices	Urine – reduced
Aversion – fatty food	Stool – difficult to pass on & off,
Appetite – reduced from nausea	Perspiration – reduced
Thirst – reduced from vomiting	Breath – normal
Sleep / Dreams – unrefreshing sleep	Other discharge – vomitus of yellowish fluid

Life space investigation:
Born & brought up in Attoor, belongs to low socio - economic status.
History of developmental milestones arte normal with age.
Vaccination done successfully without reaction.
Menarche at the age of 14 years old, with regular menstrual cycles.
Studied upto 12^{th} standard, she is interested in fine art works.
Working as a tailor since 17 years.
Married at the age of 19 years old, with satisfactory life, husband working as driver.
During first pregnancy (5 years ago) suffering from vomiting and constipation.
1^{st} pregnancy – institutional, full term normal vaginal delivery.

Physical Examination:

General Examination:
Patient is conscious, alert, oriented, afebrile, moderately build & nourished, mild pallor, not icteric, not cyanosed, no nails clubbing, no pedal oedema, no generalized lymph adenopathy.

Vital signs
Weight 54 kg, B. P 110/70 mmHg, Pulse 90 bpm, regular, Temperature 98.2* F

Systemic Examination:
Cardio - vascular: S_1 S_2 heard in mitral, tricuspid, pulmonary, aortic areas normal
No murmur heard.
Respiratory: Air entry equal bilaterally, No added sounds heard,
Normal vesicular breath sounds heard all over lung field,
Neurological: No focal neurological deficit.
Per abdomen: Uterine fundus at 14 weeks.

Provisional Diagnosis: Hyperemesis Gravidarum

Differential Diagnosis: Reflux Oesophagitis, Urinary Tract Infection, Renal Calculus & Uremia.

Investigations:
Hb = 10.8 g%,
Blood Sugar (R) = 96 mg/dl
Blood Urea = 30 mg/dl
Serum Creatinine = 0.7 mg/dl
Urine Acetone = (++++)
Serum Electrolytes
Na^+ = 138 mequ/L
K^+ = 3.8 mequ/L
Cl^- = 102 mequ/L

Final Diagnosis:
$G_2P_1L_1$ at 13^{+3} weeks with Hyperemesis.

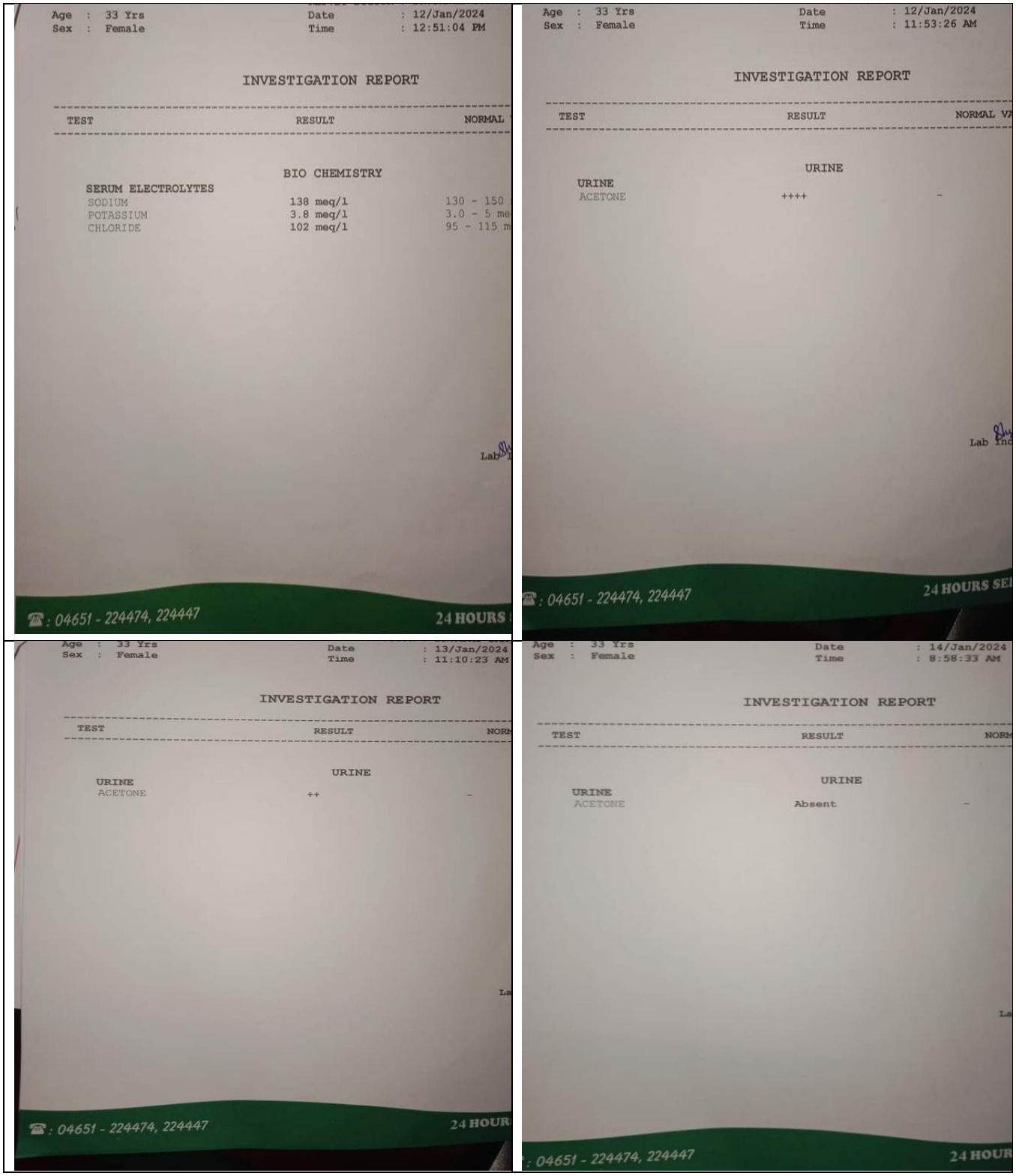
Totality of Symptoms:
1) Anxious whether miscarriage would happen
2) Aggravation < after eating / drinking
3) Amelioration > lying down calmly
4) Desire for refreshing juices
5) Aversion to fatty food
6) Appetite & Thirst are reduced
7) Difficulty in passing stool
8) Tongue is dry with bitter taste
9) Continuous vomiting with nausea in pregnancy.

Prescription:

Rx
SYMPHORICARPUS RACEMOSA 30 C b. d for 7 days

General Management:
Taking easily digestible food in small quantity at frequent interval.
Lying head side raised with left lateral position sleeping.
Bed rest, avoid travelling.

Prognosis:



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