



International Journal of Allied Medical Sciences and Clinical Research (IJAMSCR)

IJAMSCR | Volume 2 | Issue 4 | Oct-Dec- 2014
www.ijamscr.com

Case Report

Health research

First trimester hyperemesis gravidarum: A case report

*Angel Rajakumari.G¹, Sunitha M², Soli.T.K³

¹Vice Principal, Department of Obstetrics and Gynecology, Chandana College of Nursing, Suryapet, Andharapradesh, India.

²Principal, Shadan women's college of pharmacy, Khairatabad, Hyderabad, India.

³Staff Nurse, Paras Hospital, Gurgaon, India

ABSTRACT

Hyperemesis gravidarum, the most severe form of nausea and emesis during pregnancy, can seriously affect the health and well-being of the pregnant woman and her unborn fetus. Intravenous fluids, antiemetic medications and dietary manipulation can be tried initially. If these interventions are not effective, several investigations have shown rapid relief of nausea and vomiting, achievement of nutrition goals and successful pregnancy outcomes after the initiation of gastric enteral feeding. This article will review diet, medications and the use of enteral feeding in patients with hyperemesis gravidarum. The aim of this case report is to highlight the clinical presentation and transient phenomenon of gestational transient hyperthyroidism with hyperemesis gravidarum, and also to emphasize on the recommended management.

Key Words: Hyperemesis gravidarum, primi gravid mother, Frist Trimester.

INTRODUCTION

Hyperemesis gravidarum is a miserable condition for patients and a frustrating one for the staff caring for them. While nausea and vomiting are common and expected in early pregnancy, the syndrome of hyperemesis gravidarum, which can be defined as persistent vomiting starting in the first trimester, is relatively uncommon. A study in 1992 found that among 9,088 pregnancies 35 had hyperemesis of sufficient severity to require intravenous rehydration.¹ Mild to moderate nausea and emesis are common in early pregnancy, but the most severe form, hyperemesis gravidarum (HEG), can seriously affect the health and well-being of the pregnant woman and her unborn fetus. HEG is a diagnosis of exclusion that has no single accepted definition. It is a condition in pregnancy characterized by intractable nausea and emesis that can lead to dehydration, metabolic disarray, nutritional

compromise, psychological disturbances and termination of the pregnancy. Key to the diagnosis of HEG is the patient's presentation and onset of symptoms that are consistent with this condition. The nausea and emesis of HEG are unrelenting with onset between the fourth and tenth week of gestation with symptoms resolving between the fifteen and twenty week of gestation. In some unfortunate cases, it can last the entire pregnancy.²

CASE REPORT

A 29 year-old pregnant mother, 13th week of pregnancy was admitted to a hospital in suryapet with frequent vomiting of more than 13 times daily, epigastric pain since her 11th week of pregnancy. The vomitus was mainly water and saliva as she was unable to tolerate orally. She also complains of nausea, dizziness, lethargy, loss of appetite and weight, constipation, and right-sided

headache. She denies symptoms suggestive of hyperthyroidism, such as fever, palpitation, agitation, diarrhea, and heat intolerance. She underwent caesarean section when giving birth to her first child due to breech birth. However she did not have hyperemesis gravidarum in her first pregnancy. She has no known medical illnesses and non-remarkable family history of thyroid disease. Upon physical examination, the patient was a febrile, alert and conscious but dehydrated. Her pulse rate was 89 beats per minute with blood pressure of 110/70 mmHg. No hand tremors were observed. There was no conjunctiva pallor, but the patient was jaundiced. In addition, there were no eye signs of Graves' ophthalmopathy and palpable goiter. Her lungs were clear and normal heart sounds (S1, S2) were heard with no murmurs. Her abdomen was soft but tenderness at right hypochondrium and epigastric region. The rest of the examinations were unremarkable. Her laboratory test results showed consistent normocytic normochromic anemia, elevated bilirubin, ALT and AST, but low serum creatinine, serum potassium, magnesium and creatine kinase. TSH receptor antibodies, antinuclear antibody test, antithyroglobulin antibody test and antimicrosomal antibody test results show negative. Furthermore, the investigations for hepatitis A, B, C and the acid fast bacilli test, also show non-reactive. The patient was given an intravenous drip of dextrose saline with potassium chloride throughout her stay in the hospital. Antithyroid medication was not introduced though her thyroid function showed hyperthyroidism. Her thyroid function test results normalize itself during her 16 th gestational week. Her frequent vomiting was significantly reduced and was able to tolerate orally. Her general condition was stable and she was discharged after three weeks of hospital admission.

DISCUSSION

Hyperemesis gravidarum is defined as intractable excessive vomiting during pregnancy with onset before the 13th gestational week, usually the woman is unable to

tolerate orally and requires intravenous hydration. It is likely to be associated with hyperthyroidism secondary to the high hCG level. Various studies showed 0.3 – 1% prevalence of HG in pregnancy, with a mean onset during the 3rd gestational week, peaks in 11th–13th gestational week, and subsides after 14th-18th gestational week. Hyperemesis gravidarum is possibly associated with signs of disturbed nutritional status (alterations in electrolyte balance, more than 5% weight loss, ketosis, acetonuria), neurological disturbances, retinal hemorrhage, liver and renal damage. On the other hand, the most common thyroid disease in all pregnancies is Graves' disease (85 – 90%), while the secondly most common is gestational transient hyperthyroidism, which its incidence is 1–2% in all pregnancies. Gestational transient hyperthyroidism is defined as firstly diagnosed hyperthyroidism in early pregnancy, which resolves spontaneously by the early second trimester of pregnancy, without evidence of autoimmune thyroid disease and physical findings associated with Graves' disease⁴ Gestational transient hyperthyroidism occurs up to two-thirds of women with hyperemesis gravidarum.

CONCLUSION

The diagnosis and treatment of HEG should take place as early as possible to prevent symptom exacerbation, overwhelming feelings of isolation and loss of control, and the need for hospitalization or extensive outpatient services. An individualized treatment plan needs to be formulated that includes symptom relief, adequate nutrition support, validation of the symptoms and emotional support. Health care providers should expect that the majority of women experiencing HEG would be ambivalent about their pregnancy for as long as their symptoms persist. Multiple interventions may need to be tried to provide symptom relief that enables the provision of adequate nutrients and fluid. Gastric EN is a safe and effective method to maintain nutrition and hydration and help alleviate the symptoms of HEG.

REFERENCES

- [1]. Abell T, Riely C. Hyperemesis gravidarum. *Gastroenterol Clin N Am*, 1992; 21(4):835-849.
- [2]. Gross S, Librach C, Cocutti A. Maternal nutritional effects and severe hyperemesis gravidarum: A predictor of fetal outcome. *Am J Obstet Gynecol*, 1989; 160(4):906-909.
- [3]. Moore, TR. Diabetes in pregnancy. In: *Maternal-Fetal Medicine* (4th ed.), Creasy RK, Resnik R (Eds). W.B. Saunders, Philadelphia, PA, 1999; 964.

- [4]. Van Stuijvenberg ME, Schabort I, Labadarios D, et al. The nutritional status and treatment of patients with hyperemesis gravidarum. *Am J Obstet Gynecol*, 1995;172: 1585-1591
- [5]. Tan, Y.L, Loh, K.C., Yeo, S.H. et al. Transient hyperthyroidism of hyperemesis gravidarum. *BJOG: an International Journal of Obstetrics and Gynaecology*. June 2002; 109: 683–688.