



Is Hyperemesis Gravidarum Have A Risk For Your Baby (Placental Dysfunction) ?



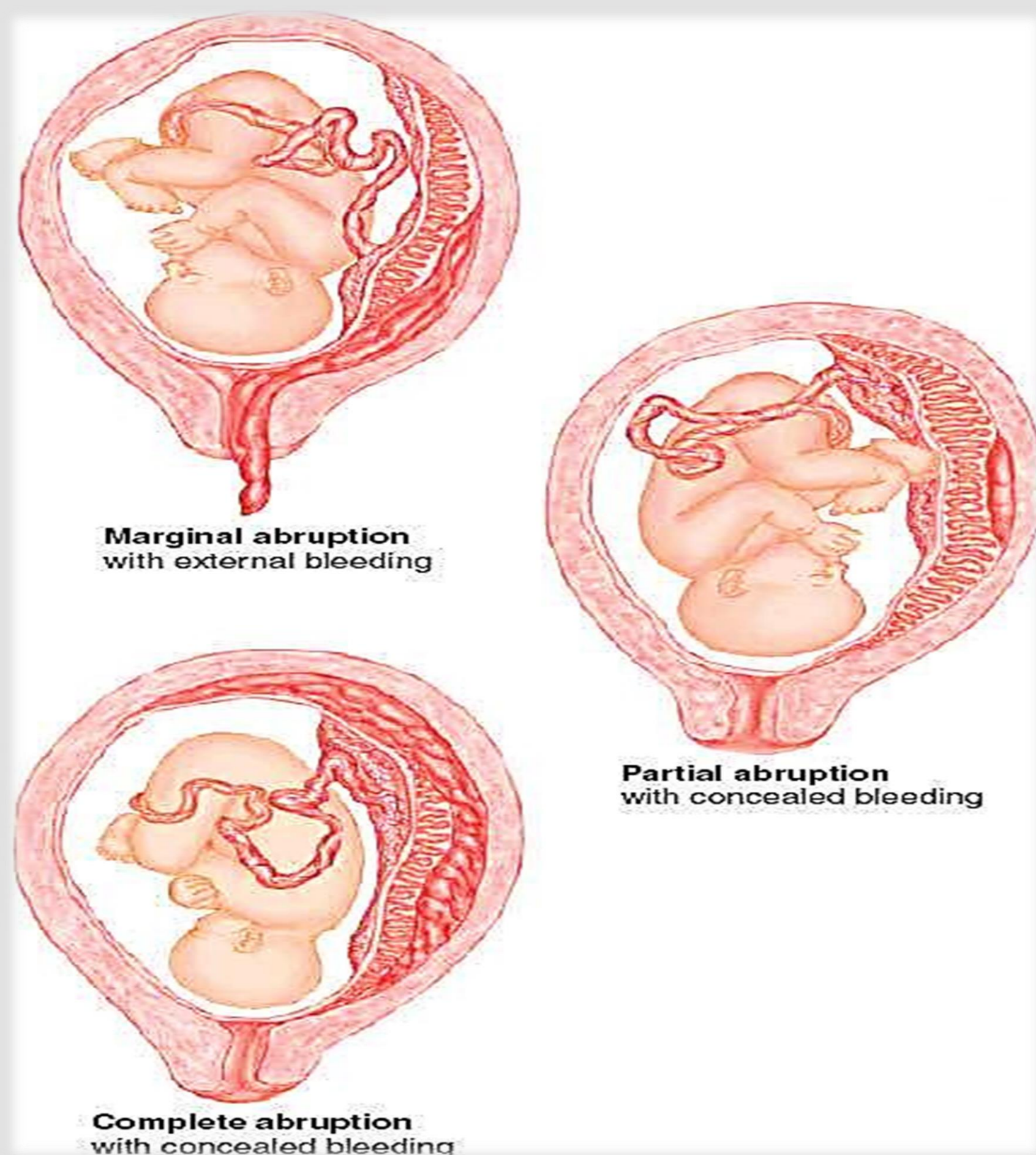
Marwa Abdalaziz Alferegan . 3rd Basic Medical science
Libyan International Medical University

Introduction

Hyperemesis gravidarum (HG) is a pregnancy complication that is characterized by severe nausea, vomiting, weight loss, and possibly dehydration, Signs and symptoms may also include vomiting several times a day.

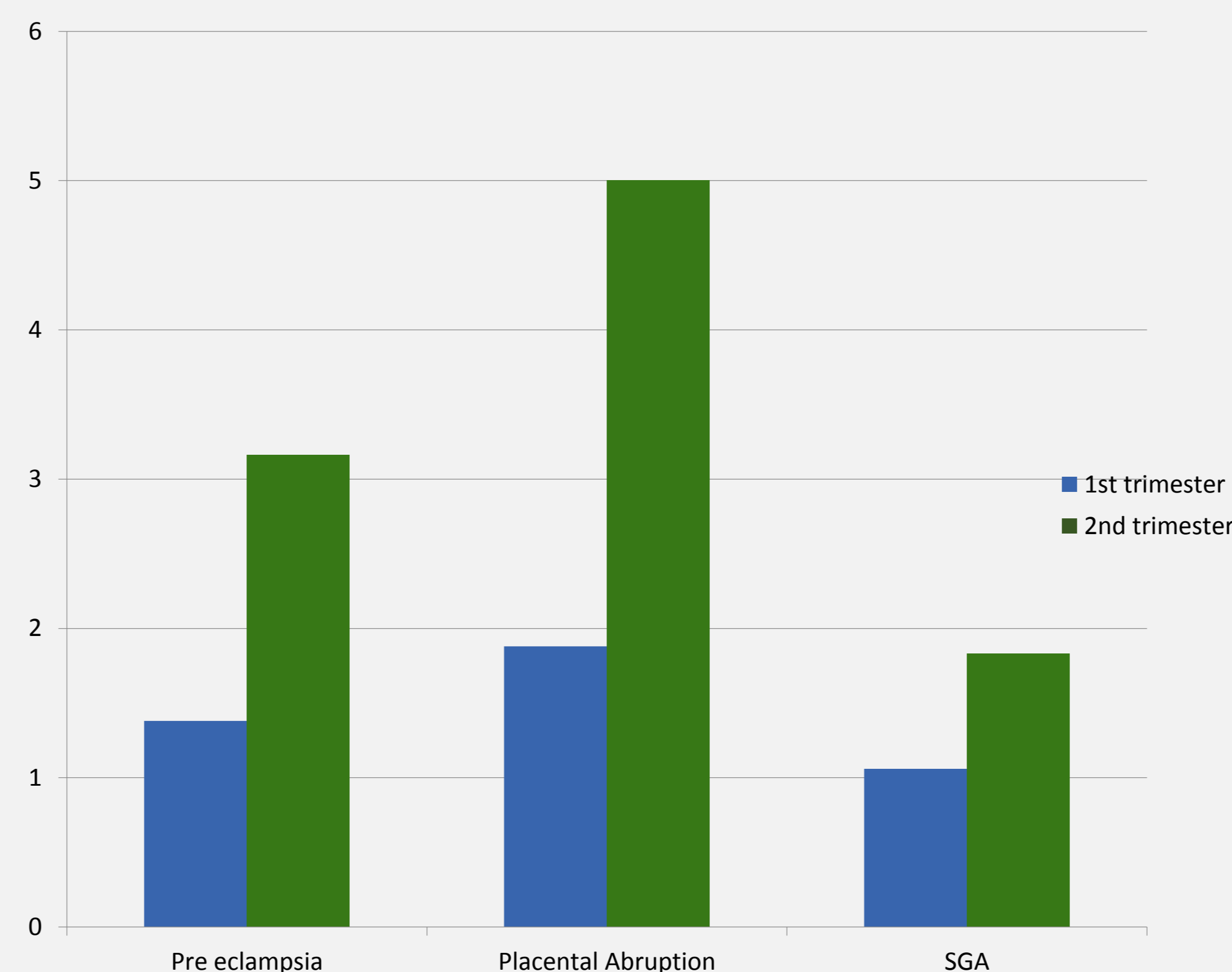
placental dysfunction is including :

- Pre-eclampsia
- Placental abruption
- Small for gestational age(SGA)
- Stillbirth



Method

From the Swedish Medical Birth Register (MBR) were estimated for placental dysfunction disorders in women with an inpatient diagnosis of HG, using women without inpatient diagnosis of hyperemesis gravidarum as reference.



Result

Women with HG in the first trimester had only a slightly increased risk of pre-eclampsia and in the second trimester had a more than doubled risk of preterm (<37 weeks) pre-eclampsia. Athreefold increased risk of placental abruption and a 39% increased risk of an SGA birth were: 2.09 [1.38-3.16], 3.07 [1.88-5.00] and 1.39 [1.06-1.83].

Discussion

Nausea and vomiting are common and usually benign symptoms of primarily the first trimester of pregnancy.

The onset of nausea correlates with the level of **human chorionic gonadotropin (HCG)**, which typically rises within 4 weeks after the last menstrual period, peaking at approximately 9 weeks of gestation. Sixty percent of nausea cases resolve by the end of the first trimester. The function of **HCG is an important regulator of trophoblast migration** into the maternal deciduas and adjacent spiral arteries, which starts in early pregnancy. Elevated hCG levels in the second trimester could be a result of an insufficient first-trimester trophoblast migration into the spiral arteries, with a subsequent placental hypoxia that stimulates the secretion of other variants of hCG. Low first-trimester and increased second-trimester hCG levels are associated with later development of pre-eclampsia and SGA

Conclusion

This study has demonstrated associations between HG diagnosed in the second trimester and placental dysfunction disorders, preterm pre-eclampsia, placental abruption and SGA.

The clinical take-home message of our findings is that pregnancies with HG in the second trimester demand an increased alertness and supervision for the development of adverse outcomes associated with abnormal placentation.

References

Vikanes A, Grjibovski AM, Vangen S, Magnus P. Variations in prevalence of hyperemesis gravidarum by country of birth: a study of 900,074 pregnancies in Norway, 1997–2009. Health. 2008