

## Chapter 4

### NAUSEA AND VOMITING OF PREGNANCY

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Nausea and vomiting is one of the most common complaints seen in pregnancy. These symptoms are generally defined as physiological changes in pregnancy. However, sometimes these may be a harbinger of some disease such as thyroid diseases, cholecystitis, pancreatitis, hepatitis, and psychiatric disorders. These symptoms can affect both the patient and her family, can decrease quality of life, especially when persistent and/or severe (Lacasse, Rey, Ferreira, Morin, & Berard, 2008a). Severe symptoms can negatively affect work performance and daily functioning, and may cause anxiety, and lead to some women considering termination of pregnancy or avoiding a future pregnancy (Tan, Lowe, & Henry, 2018).

#### DEFINITION AND INCIDENCE AND RISK FACTORS

Nausea and vomiting of pregnancy can be categorized into degrees of severity by assessing the duration of these symptoms and the amount of vomiting per day (Attard et al., 2002). Hyperemesis gravidarum (HEG) is defined as the severe end of the symptom spectrum (including weight loss exceeding 5 percent of pre-pregnancy body weight), whereas morning sickness defined as mild to moderate disease (Koot et al., 2018). The incidence of HEG is about 3% and of all pregnancies have prevalence rates for nausea of 50–80% and for vomiting of 50% (Matthews, Haas, O’Mathuna, & Dowswell, 2015). Ethnic differences and differences in the definition of the disease may account, in part, for the variability. The probability of emergence of these symptoms in the next pregnancy is 15% to 81% (Trogstad, Stoltenberg, Magnus, Skjaerven, & Irgens, 2005). Some clinical conditions such as multiple gestation (Basso & Olsen, 2001), hydatidiform molar pregnancy (Hou, Wan, Xiang, Qi, & Yang, 2008), daughters of women with hyperemesis (Vikanes et al., 2010), and acid reflux or other gastrointestinal disorders may increase the risk of nausea and vomiting (Gill, Maltepe, & Koren, 2009). Using alcohol and cigarettes may decrease the risk of these symptoms (Weigel & Weigel, 1988).

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intravenously every eight hours) (Ramin et al., 2018). Ondansetron can cause some adverse effects such as headache, somnolence, tiredness, and constipation. Also, it may prolong the QT interval. In addition several congenital defects such as cardiac septum defect and cleft palate were found in some studies (Parker, Van Bennekom, Anderka, Mitchell, & Stu, 2018). There are no pregnant women data on the security of granisetron and dolasetron in pregnancy.

### ***Steroids***

There is a deficiency of evidence that glucocorticoids are effective. For treatment of refractory to other medications in pregnant women with severe HEG, glucocorticoids may be tried. However, use of glucocorticoids should be avoided in the first trimester, since it may cause oral cleft for fetus (Pradat et al., 2003). Methylprednisolone 16 mg every 8 hours, orally or intravenously, for 3 days (Ramin et al., 2018).

### **Parenteral Nutrition**

Intravenous hydration should be given for the patient when she cannot tolerate oral liquids for a long time or if clinical signs of dehydration are present. Correction of ketosis and vitamin deficiency should be strongly considered. Dextrose and vitamins should be given to the patient. Enteral tube feeding should be admitted as the first-line treatment to provide nutritional support to the woman with hyperemesis gravidarum who is refractory to other medical therapy and cannot maintain her weight (Erick et al., 2018).

### **Hospitalization**

When a woman cannot tolerate fluids due to hyperemesis and cannot respond to outpatient treatment, hospitalization is suggested for evaluation and treatment of dehydration and electrolyte imbalance (McCarthy et al., 2014).

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