Educational Topic 8:
Maternal-Fetal Physiology

Rationale: Knowledge of the physiologic adaptations to pregnancy will promote understanding of the impact of pregnancy on health and disease.

Intended Learning Outcomes:
A student should be able to:

- Describe the maternal physiologic and anatomic changes associated with pregnancy
- Describe fetal and placental physiology
- Interpret common diagnostic studies during pregnancy

TEACHING CASE

CASE: You are seeing a new prenatal patient today. She is a 32 year-old G1 who is a nurse in the dialysis unit. She is in excellent health, a former college athlete. She has sent her own labs. Her vital signs are normal and she has gained 4 lbs. Your physical exam is normal and confirms her menstrual dates of 8 weeks. She has brought you a list of her questions.

COMPETENCY-BASED DISCUSSION & KEY TEACHING POINTS:
Competencies addressed:
- Communication
- Patient Care
- Medical Knowledge

1. I’m urinating all the time so after lunch yesterday I dipped my urine. It showed no bacteria but +2 glucose. Why would this be? Do I have diabetes?

   Why are pregnant women more likely to get diabetes?
2. My T4 is high, what meds do you want to start me on?

3. I'm nauseous all day, but only vomit in the evening and when I do, even hours after dinner it looks undigested. Why would that be? Is it true if I'm feeling sick I'm less likely to miscarry?

Your patient is now 32 weeks with a normal pregnancy to date, including her glucose tolerance test. She has stopped sending her own labs but still has a lot of questions.

4. My mom says I sound breathless all the time. I still walk up 5 flights to my unit but I am more tired and my back is starting to bother me at night. I have noticed my O2 sat is normal but my pulse is 90 at rest, and it used to be 50. What do these symptoms mean? Am I anemic?

5. My cousin told me I should be eating iodized salt to protect my baby's thyroid function. Is this true?

REFERENCES