

Gestational Diabetes

Learning Objectives

Review the following Learning Objectives as an organized beginning to your study of this module. As you read the Learning Objectives, note key words which will aid you in finding the information in the texts. When you complete the module, revisit this list and check for areas that require further investigation.

- Review Liver module and relationship between liver and pancreas in maintaining blood sugar.
- Identify the classification types of diabetes.
- Identify gestational diabetes risk factors in lifestyle, diet, and family history.
- Identify the screening and testing options for detecting gestational diabetes.
- Identify the routine application of GTS and GTT in obstetrical practice.
- Identify your local community standard for GTS testing values requiring follow up.
- Identify the benefits of random glucose screening, or 2 hour postprandial screening, over a 50 gram glucose load and one hour GTS.
- Identify the historical controversy over gestational diabetes and OGTT.
- Identify the physiology of hypoglycemia.
- Explore the implication of hypoglycemia in long term development of diabetes.
- Describe the effects of pregnancy on maternal blood glucose levels.
- Identify nutritional and lifestyle changes that support normalizing blood glucose.
- Understand that some women have glucosuria and not gestational diabetes, and others may truly have diabetes but not spill glucose in their urine.
- Identify the apparent relationship between hypertension and gestational diabetes.
- Identify the risks of maternal gestational diabetes for the newborn.
- Identify newborns for whom glucose monitoring is indicated.
- Identify the current standards of practice in your local community for monitoring gestational diabetes and newborn glucose levels.
- Review informed consent/informed choice.
- Review Hypertension and Pre-eclampsia modules.

Gestational Diabetes, continued

Study Sources

The following texts are recommended for completion of this module. Use them to cross reference and build a more comprehensive understanding.

Using key words from the Learning Objectives, search the index. Read those pages listed, and read the chapter in which they are found. Establish a context for the information so that you understand how other topics are related. In addition, read the chapter headings in the Table of Contents, and flip through each text to familiarize yourself with the content of chapters. As you work through Study Group modules, you will eventually read each text in its entirety. (the exception is *Nutrition Almanac* which is useful primarily for digestive physiology and nutrition content).

Holistic Midwifery, Vol. I, II, III (when available), Frye

Understanding Diagnostic Tests in the Childbearing Year, Frye

Nutritional Almanac, Kirschmann

Varney's Midwifery

Myles Textbook for Midwives

Birth Emergency Skills Training, Gruenberg

Assessment and Care of the Well Newborn, Thureen, Deacon, O'Neill, Hernandez

The Natural Pregnancy Book, Romm

Healing Wise, Weed

Related Topics

- ◇ Health and Family History
- ◇ Nutrition
- ◇ Physical Assessment
- ◇ Prenatal Lab Work and Assessment
- ◇ Hypertension
- ◇ Pre-eclampsia
- ◇ Uterine Size and EDD Discrepancies
- ◇ UTI
- ◇ Liver
- ◇ Newborn Exam
- ◇ Post Partum Care

Gestational Diabetes Questions

1. Describe the types of true diabetes.
2. Describe the historical controversy over gestational diabetes and OGTT.
3. List the risk factors for gestational diabetes.
4. What are the symptoms of diabetes?
5. Describe the effects of pregnancy on maternal blood glucose levels.
6. Explain the role of glucose urinalysis in monitoring for gestational diabetes.
7. Define the following terms:
 - Screening Glucose Challenge Test (aka GTS)
 - GTT
 - 2 hour post prandial
 - random glucose value
8. At what point in pregnancy is gestational diabetes risk explored, and at what point in pregnancy is testing done?
9. What is the standard screening cut-off value for glucose screening in your community?
10. What does a high fasting blood glucose level indicate?
11. What are the benefits of performing a 2 hour postprandial screen for gestational diabetes, over a one hour GTS?
12. What nutritional and lifestyle changes support normalizing blood glucose?
13. Your client is spilling glucose in her urine at every visit. In most instances, she has eaten within a few hours of your visits. Explain how this may be normal.
14. What are the risks of poorly controlled maternal gestational diabetes for her baby?

Continued...

Gestational Diabetes Questions, continued

15. Explain the steps of a glucose tolerance screen and when a glucose tolerance test is indicated.
16. Explain the steps of a glucose tolerance test.
17. In the context of gestational diabetes testing, describe how you use informed choice/informed consent with your clients.
18. What would you have to eat to consume 50 grams of glucose?
19. Describe the physiology of hypoglycemia.
20. What are the symptoms of hypoglycemia during pregnancy?
21. What diet and lifestyle indications might you observe in someone with hypoglycemia?
22. Hypoglycemia may be a precursor to which condition?
23. What dietary instruction would you offer a pregnant client who is hypoglycemic?
24. What piece of equipment may be utilized on site for evaluating maternal blood sugar levels?
25. What are the risks of maternal gestational diabetes for the newborn?
26. Identify newborns for whom glucose monitoring is indicated.
27. What are the protocols for monitoring newborn glucose levels at your local community hospital or with the local pediatricians?
28. What is the current midwifery standard of practice in your area regarding gestational diabetes screening?

Continued...

Gestational Diabetes Questions, continued

29. What is the current local obstetrical standard of practice regarding gestational diabetes and screening for pre-eclampsia?
30. What is the current local obstetrical standard of practice regarding gestational diabetes and induction of labor for post dates pregnancy?
31. If a woman is diagnosed with gestational diabetes, what is the post partum follow up for her care?

Projects (send completed projects with the rest of your course work for this module)

1. Research local services that assist prenatally with gestational diabetes. Add this to your client referral and resource list, with a brief description of the services offered. (This may be a list you keep handy rather than distribute to all clients)
2. Draft practice guidelines for gestational diabetes screening in your own practice, including reference to your use of informed consent, screening procedures, timing of tests, and response to newborns needing glucose monitoring. Submit this draft and include it later in your Practice Guidelines projects (in the Charting and Practice Guidelines Module.)

Gestational Diabetes, continued

Skills

Following are excerpts from the NMI forms for assessment of midwifery skills, which include all skills identified and required by NARM. Review the following skills and consider how they each relate to the content of this module. If you are currently working with a preceptor, take this opportunity to focus on these areas. During Supervised Primary Care you will formally evaluate these skills together using the NMI form *Preceptor Evaluation/Student Self-Assessment of Midwifery Skills*.

1. Midwifery Counseling, Education and Communication:

- A. Provides interactive support and counseling and/or referral services to the mother regarding her relationships with her significant others and other health care providers
- B. Provides education, support, counseling and/or referral for the possibility of less-than-optimal pregnancy outcomes
- C. Provides education and counseling based on maternal health/reproductive/family history and on-going risk assessment
- D. Facilitates the mother's decision of where to give birth
 - 1. The advantages and the risks of different birth sites
 - 2. The requirements of the birth site
 - 3. How to prepare, equip and supply birth site
- E. Educates the mother and her family/support unit to share responsibility for optimal pregnancy outcome
- F. Educates the mother concerning the natural physical and emotional processes of pregnancy, labor, birth and post partum
- G. Applies the principles of informed consent
- H. Provides individualized care
- I. Advocates for the mother during pregnancy, birth and postpartum
- J. Provides education, counseling and/or referral, where appropriate for:
 - 3. Prenatal testing
 - 4. Diet, nutrition and supplements
 - 8. Complications

4. Labor, Birth and Immediate Postpartum

- D. Assesses the condition of, and provides care for the newborn by:
 - 1) keeping baby warm,
 - 2) making initial newborn assessment