**Prenatal Lab Work and Assessment**

Study Group Module

**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 the Genetic and Prenatal Screening module.
* Identify the standard prenatal lab work and the established lab work schedule for low risk pregnant women.
* Understand the risk of Rh sensitization and the use of Rhogam.
* Identify the four blood groups.
* Describe syphilis, gonorrhea and chlamydia and their effects.
* Explore the implications of Beta Strep infection.
* Identify how a sonogram can be used to establish an estimated due date.
* Identify the limitations of sonograms to establish EDD or estimate fetal weight.
* Identify the components of the biophysical profile and determine how this screen might be used.
* Understand the PUBs procedure and identify when it may be utilized.
* Understand the NST and contraction challenge test and how they may be utilized to determine fetal well being.
* Review the purpose of glucose screening and testing.
* Identify the GTS and GTT and their appropriate application.
* Identify the theoretical link between HIV and AIDS.
* Determine useful screening questions for HIV risk status, and establish appropriate screening guidelines for your own practice.
* Identify the local community standard for hepatitis screening.
* Identify the local community standard for vaginal Beta Step screening and treatment.
* Identify the local lab services for newborn cord blood, PKU and bilirubin counts.
* Review the TORCH infections and identify the correlating lab work for their detection.
* Review the Herpes module.
* Review the Gestational Diabetes module.
* Review the Urinary Tract Infection module.
* Review the Well Woman Care module.
* Review the Pre-eclampsia module.
* Review the Jaundice module.
* Review the Fertility and Conception module.
* Review the Liver module (Hepatitis).
* Review the Post Partum module.

Identify the collection materials and procedure in preparation for learning venipuncture skills.

Draft practice guidelines for prenatal and post partum lab work in your own practice.

Create or adapt prenatal and post partum forms for recording lab work results.

Demonstrate your ability to discuss with clients, use informed consent, and secure the collection of the appropriate lab samples.

Demonstrate your ability to comprehend and apply the requested information provided in the lab reports.

**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.

* Understanding Diagnostic Tests in the Childbearing Year, Frye
* Holistic Midwifery, Vol. I, II, III (when available), Frye
* Varney’s Midwifery
* Myles Textbook for Midwives
* Human Anatomy and Physiology, Marieb
* Natural Healing in Gynecology, Nissim
* The Natural Pregnancy Book, Romm

**Related Topics**

* Nutrition
* Fertility and conception
* Gestational diabetes
* Rh sensitization and Rhogam
* IUGR
* Size and EDD discrepancy
* Post dates pregnancy
* UTI screening

Informed Choice/Informed Consent**Prenatal Lab Work and Assessment Questions**

1. List the standard initial prenatal lab work performed for low risk women.
2. List the standard 2nd trimester lab work.
3. List the standard 3rd trimester lab work.
4. When is a PAP smear performed during pregnancy?
5. What vaginal cultures are recommended during pregnancy?
6. What sort of organism is gonorrhea? What does it do?
7. Your client was diagnosed and treated for gonorrhea 18 months ago. She is holding her newborn. Is this baby at risk of having contracted gonorrhea?
8. Where may gonorrhea reside?
9. What sort of organism is chlamydia?
10. How common is chlamydial infection?
11. What are the effects of chlamydia infection?
12. What tests are available for detection of chlamydia?
13. What sort of organism is Beta Strep?
14. How prevalent is GBS colonization among women?
15. Where does GBS reside in the body?
16. What are the possible effects of GBS infection, for a mother during pregnancy and post partum, and for the newborn?
17. How is a specimen collected for the culture of GBS?
18. What do the VDRL and RPR detect?
19. What sort of organism is syphilis?
20. Why is syphilis able to cross the blood brain barrier?
21. How is syphilis spread?
22. Who is at risk for Rh sensitization?
23. When is Rhogam indicated?
24. Briefly describe how Rh sensitization happens, and how Rhogam is used to benefit mothers and babies.
25. What does the CBC include?
26. How does pregnancy effect a woman’s white blood cell count?
27. Which tests indicate or rule out anemia?
28. List the four blood types and their corresponding tolerance for compatibility.
29. What does it mean if a woman’s Rubella titre is positive?
30. What do the acronyms HIV and AIDS represent?
31. What is a syndrome?
32. What is the current perception regarding the connection between HIV and AIDS?
33. List some useful screening questions for helping a woman determine her HIV risk status.
34. When is a sonogram most useful in establishing an estimated due date.
35. What are the limitations of sonograms in establishing an EDD or estimating fetal weight?
36. Briefly describe the PUBs procedure. What does it provide? When might it be utilized?
37. List the components of the biophysical profile and describe how this screen might be used.
38. Describe the NST and contraction challenge test and how they might be utilized to determine fetal well being.
39. What is indicated if glucose screening reveals a high level of blood glucose? When would a GTT be recommended?
40. Do physician or hospital practice guidelines in your area differ in the treatment of post dates pregnancies depending on whether gestational diabetes screening has been performed?
41. List the TORCH infections.
42. What are the symptoms of possible TORCH infection?
43. What is the current standard in your community for hepatitis screening during pregnancy?
44. What is the current standard in your community for tuberculosis screening during pregnancy?
45. Describe your use of informed choice/consent as pertains to lab work in pregnancy.
46. What tests are ordered for cord blood post partum?
47. List the collection materials/supplies used in venipuncture.
48. Describe the various tubes for blood collection.

**Projects**

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

1. What is the current standard in your community for Group B Strep screening and treatment during pregnancy, and the subsequent follow-up for newborns?
2. Draft practice guidelines for Group B Strep screening and treatment in your own practice. Submit this draft and include it later in your Practice Guidelines projects (in the Charting and Practice Guidelines Module.)
3. Draft practice guidelines for prenatal and post partum lab work in your own practice. Submit this draft and include it later in your Practice Guidelines projects (in the Charting and Practice Guidelines Module.)
4. Create or adapt prenatal and post partum forms for recording lab work results. This may be done as part of a more comprehensive charting form.
5. What are the local lab services in your area, and what are their hours of operation? Where are PKU tests, jaundice screens and cord blood processed? What is the availability of stat lab reports?

**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.

3. Maternal Health Assessment:

 K. Recognizes and responds to potential prenatal complications by:

 8. Identifying and dealing with pre-term labor with:

 B) Consultation and/or treatment including:

 1) Increase of fluids,

 2) Non-allopathic remedies,

 3) Discussion of the mother’s fears,

 4) Food to be eaten at least every two hours,

 5) Consumption of alcoholic beverage,

 6) Evaluation of urinary tract infection,

 7) Evaluation of maternal infection

 9. Assessing and evaluating a post-date pregnancy by monitoring /assessing: a) The need for consultation,

 b) Fetal movement, growth, and heart tone variabliity,

 c) Estimated due date calculation,

 d) Previous birth patterns,

 e) Amniotic fluid volume,

 f) Maternal tracking of fetal movements ,

 g) Referral for ultrasound,

 h) Referral for non-stress test

 i) Referral for contraction stress test,

 j) Referral and collaboration for biophysical profile,