Objectives

- Summarize the physiologic and pathologic processes of the perinatal period that contribute to maternal states of hypervolemia, hemodilution, hypercoagulability and anemia and identify the maternal-fetal implications of these states/conditions in terms of management and outcomes.

- Contrast the differences between the nonpregnant and pregnant woman related to values for blood, plasma and red cell volumes as well as for blood cell components and recall the impact that these changes have on clinical assessment and management during pregnancy.

- Outline the development of the hematologic system in the fetus and include a description of the role and significance of hemoglobin formation and how the transition in hemoglobin form relates to oxygen affinity.

Content Outline

1. Changes in Maternal Hematologic System and Hemostatic Processes During Pregnancy
   1.1 Blood & plasma volumes
   1.2 Blood cellular & plasma components
   1.3 Coagulation factors & process of hemostasis

2. Changes in Maternal Hematologic System and Hemostatic Processes in the Intrapartum Period
   2.1 Hematologic value changes in labor

3. Changes in Maternal Hematologic System and Hemostatic Processes in the Postpartum Period
   3.1 Impact of blood loss at the time of birth

4. Clinical Implications of Alterations in the Hematologic System and Hemostasis for the Pregnant Woman and Fetus
   4.1 Iron requirements and disorders involving anemia
   4.2 Genetic disorders of hemoglobin structure or synthesis

Reading Material Resources

This NCC CE module is based on the resources listed below.

The reading materials are in the form of a PDF and can be accessed from the NCC online testing center or your NCC account once the module is purchased.