

Unit 7: Hematology
Chapter 33 & 34
ONLINE CONTENT (2H)

Complete the worksheet and submit in the Unit 7: Hematology dropbox by March 18, 2024 at 0800. Please be sure to bring a copy to class on March 18, 2024.

Table 1	Iron Deficiency Anemia	Thalassemia	Cobalamin (Vitamin B ₁₂) Deficiency	Folic Acid Deficiency
Etiology	Inadequate dietary intake of iron, malabsorption, blood loss, or hemolysis	Inadequate production of normal Hgb which decreases RBC production	Pernicious anemia caused by absence of intrinsic factor.	Folic acid deficiency
Clinical Manifestations	glossitis, cheilitis	Mild to moderate anemia, microcytosis, hypochromia, mild splenomegaly, bronzed skin color	GI manifestations, sore red beefy and shiny tongue, anorexia, nausea, vomiting, abd pain	GI problems, thiamine deficiency, neuro symptoms
Diagnostic Studies	Laboratory values, stool occult blood test, bone marrow biopsy	Lab values,	Laboratory values	Serum folate level is low
Drug Therapy	Oral iron preparations	Blood transfusion, iron supplement, deferasirox, deferiprone, desferal	Parenteral B12, nascobal	Folate replacement therapy
Nursing Management	Treat underlying problem, reduce intake or poor absorption, replace iron	Give medications, watch for lab value changes	Assess for neuro problems, reduce risk of injury	Same as anemia

Table 2	Anemia of Chronic Disease	Aplastic Anemia	Acute Anemia due to Blood Loss	Chronic Anemia due to Blood Loss
	Caused by cancer,	Peripheral blood pancytopenia	Occurs with sudden bleeding	Chronic blood loss

Etiology	autoimmune diseases, infectious disorders, bleeding episodes. underproduction of RBCs			
Clinical Manifestations	Increased iron stores and high serum ferritin	Fatigue dyspnea, cardiovascular and cerebral responses	Hematemesis, pain, internal bleeding, tissue distention, numbness and pain in lower extremity	Bleeding ulcer, hemorrhoid, menstrual loss,
Diagnostic Studies	Laboratory values	Lab values	Lab values	Lab values
Drug Therapy	Blood transfusions, EPO therapy	Immunosuppressive therapy, oral thrombopoietin receptor agonist, iron binding agent	Fluid replacement, blood transfusions	Manage iron stores, fluid replacement, blood transfusion
Nursing Management	Correct underlying problem	Treat underlying cause	Determine cause	Stopping/addressing source

Table 3	Acquired Hemolytic Anemia	Hemochromatosis	Polycythemia
Etiology	Destruction or hemolysis of RBCs faster then they can produce	Iron overload disorder	Increased number of RBCs
Clinical Manifestations	Jaundice, general anemia manifestations	Fatigue, arthralgia, impotence, abd pain, weight loss	Headache, vertigo, itching, burning of hands and feet

Diagnostic Studies	Lab values	Lab values	Lab values
Drug Therapy	Iron	Remove blood each week	Myelosuppressive agents
Nursing Management	Maintain renal function	Manage iron levels	Assess nutrition status, begin drug therapy, assess compliance with therapies

In order to receive full credit (2H class time) for this assignment, it must be completed in its entirety by the due date/time assigned. Any assignment not completed in its entirety by the due date and time will result in missed class time and must be completed by the end of the semester to pass the course.