

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 B₁₂) Deficiency	Folic Acid Deficiency
Etiology	Inadequate diet intake, malabsorption, blood loss, hemolysis.	Group of diseases involving inadequate production of normal hgb	Gastric mucosa doesn't secrete IF	Malabsorption
Clinical Manifestations	Pallor, glossitis, cheilitis, headache, paresthesia, burning sensation of tongue.	Pale, jaundice, splenomegaly, hepatomegaly, bone marrow hyperplasia, thrombocytosis	Hypoxia, shiny tongue, anorexia, nausea, vomiting, abdominal pain, weakness, parasthesia, ataxia, impaired cognition	Stomatitis, cheilosis, dysphagia, flatulence, diarrhea
Diagnostic Studies	Stool occult blood test, endoscopy and colonoscopy, bone marrow biopsy.	Lab values, bone marrow biopsy	Lab values, endoscopy, biopsy	Lab values
Drug Therapy	Coated or sustained release capsules, take an hour before meals, dilute, IV, IM	Transfusions, deferasirox, deferi-prone, deferoxamine	Parenteral b12, cobalamin	Replacement therapy
Nursing Management	Identify and treat underlying cause, nutrition therapy, packed RBC transfusion	Stem cell transplant, monitor labs and heart and lung function, transfusion	Asses neuro, reduce risk of injury, physical therapy	High folic acid foods

Table 2	Anemia of Chronic Disease	Aplastic Anemia	Acute Anemia due to Blood Loss	Chronic Anemia due to Blood Loss
Etiology	Occurs after disease	Autoimmune disease	Sudden bleeding	Depleted iron stores
Clinical Manifestations	Underproduction of rbc's, shortening of rbc survival,	Fatigue, dyspnea, petechia, bruising, nosebleeds	Pain, numbness, tissue displacement, nerve compression, abdominal	Ulcer, hemorrhoids,
		Cbc, bone marrow	Lab values,	Lab values

Diagnostic Studies	Lab values	biopsy, pathological examination		
Drug Therapy	Epo therapy	Immunosuppressant therapy	Blood transfusions, fluids, iron,	iron
Nursing Management	Treat underlying cause	Preventing complications	Monitor blood loss, replace fluid,	Identifying source and stopping the bleeding

Table 3	Acquired Hemolytic Anemia	Hemochromatosis	Polycythemia
Etiology	Hemolysis of rbc's from extrinsic factors	Increased intestinal iron absorption	Genetic linked or secondary to disease
Clinical Manifestations	Paalor, jaundice, pain, fever, tachypnea, hypertension, nausea, vomiting	Fatigue, arthralgia, impotence, abdominal pain, weight loss, liver enlargement, cirrhosis, excess iron deposits in joints, heart problems, arthritis, skin changes	Headache, dizziness, tinnitus, vertigo, visual changes, burning and redness of extremities, angina, claudication, thrombosis, impaired blood flow, hypoxia, hypervolemia, hyperviscosity
Diagnostic Studies	Lab values	High serum iron, tbc, ferritin, liver biopsy, genetic testing	Hematocrit, hgb, rbc, bone marrow biopsy, genetic testing
Drug Therapy	Electrolyte replacement, blood products, corticosteroids	Iron chelating drugs, blood removal,	Hydration therapy, myelosuppressive agents,
Nursing Management	General supportive care	Manage organ involvement	Nutrition and fluid status, prevent complications, ongoing evaluation

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.