

AN - Anemia

AN-C **COMPLICATIONS**

OUTCOME: The patient/family will understand the complications of untreated anemia.

STANDARDS:

1. Explain that failure to fully participate in the prescribed therapy will result in a chronic lack of oxygen, possibly producing signs and symptoms such as chronic or severe fatigue, chronic dyspnea, inability to concentrate, irritability, depression, anxiety, tachycardia and susceptibility to infection. In children anemia may result in impaired brain growth/development.
2. Explain that if tissues don't receive enough oxygen, the body will compensate by increasing heart rate and cardiac output.

AN-DP **DISEASE PROCESS**

OUTCOME: The patient/family will understand anemia, the specific cause of the patient's anemia and its symptoms.

STANDARDS:

1. Explain that anemia describes a condition in which the concentration of hemoglobin is too low.
2. Explain that the kidneys, bone marrow, hormones and nutrients within the body work in cooperation to maintain the normal red blood cell count.
3. Explain that there are several categories of abnormal conditions that cause anemia: (Discuss those that pertain to this patient.)
 - a. Lack of dietary iron, vitamin B12, or folic acid.
 - b. Hereditary disorders of the red blood cells, such as Sickle Cell Anemia or thalassemia.
 - c. Disorders involving the bone marrow or spleen which inhibit red blood cell formation or destroy red blood cells.
 - d. Blood loss from the GI tract or other organ as a result of disease or trauma.
 - e. Kidney disease which may result in decreased production of red blood cells.
 - f. Thyroid or other hormonal diseases.
 - g. Cancer and/or the treatment of cancer.
 - h. Medications.
 - i. Anemia of chronic disease.

4. Explain that when the body's demand for nutrients, including iron, vitamin B12, vitamin C, or folic acid, isn't met, the body's reserves can be rapidly depleted and the nutrients will not be available to produce red blood cells.
5. Explain that the body's demand for iron will increase after blood loss, with certain medications and at certain life stages, such as infancy, adolescence, and during pregnancy.
6. Explain that symptoms of anemia may include fatigue, headache, lightheadedness, tachycardia, anxiety, depression, exertional dyspnea, and angina.

AN-FU FOLLOW-UP

OUTCOME: The patient/family will understand the importance of follow-up in the treatment of anemia.

STANDARDS:

1. Discuss the importance of follow-up care. Explain that follow-up appointments will be necessary to assess the effectiveness of the treatment.
2. Discuss the procedure for obtaining follow-up appointments and that follow-up appointments should be kept.
3. Emphasize that full participation of the treatment plan is the responsibility of the patient/family.
4. Discuss signs/symptoms that should prompt immediate follow-up.
5. Discuss the availability of community resources and support services and refer as appropriate.

AN-L LITERATURE

OUTCOME: The patient/family will receive literature about anemia and its treatment.

STANDARDS:

1. Provide the patient/family with literature on anemia.
2. Discuss the content of the literature.

AN-M MEDICATIONS

OUTCOME: The patient/family will understand the purpose, proper use, and expected outcomes of prescribed drug therapy.

STANDARDS:

1. Describe the name, strength, purpose, dosing directions, and storage of the medication. Emphasize the importance of keeping iron out of the reach of children because an overdose of iron can be lethal.

2. Describe the name, strength, purpose, dosing directions, and storage of the medication.
3. Discuss the risks, benefits, and common or important side effects of the medication and follow up as appropriate.
4. Discuss any significant drug/drug, drug/food, and alcohol interactions, as appropriate.
5. Discuss the importance of keeping a list of all current prescriptions and over-the-counter medicines, vitamins, herbs, traditional remedies, and supplements. Encourage the patient to bring this list and pill bottles to appointments for medication reconciliation.

AN-MNT MEDICAL NUTRITION THERAPY

OUTCOME: The patient/family will understand the specific nutritional intervention(s) needed for treatment or management of anemia.

STANDARDS:

1. Explain that Medical Nutrition Therapy (MNT) is a systematic nutrition care process provided by a Registered Dietitian (RD) that consists of the following:
 - a. Assessment of the nutrition related condition.
 - b. Identification of the patient's nutritional problem.
 - c. Identification of a specific nutrition intervention therapy plan.
 - d. Evaluation of the patient's nutritional care outcomes.
 - e. Reassessment as needed.
2. Review the basic nutrition recommendations for the treatment plan.
3. Discuss the benefits of nutrition and exercise to health and well-being.
4. Assist the patient/family in developing an appropriate nutrition care plan.
5. Refer to other providers or community resources as needed.

AN-N NUTRITION

OUTCOME: The patient/family will understand the role of nutrition in treating anemia.

STANDARDS:

1. Explain that diet alone usually cannot treat anemia, but plays an important role in therapy.
2. Encourage the patient to include foods rich in iron, such as lean meats, poultry, eggs, dried beans and peas, leafy green vegetables, in the diet.

3. Explain that ascorbic acid (vitamin C) helps the body absorb iron. Examples of vitamin C include citrus fruits, strawberries, broccoli, red and green peppers, tomatoes, and potatoes. If vitamin C supplementation is desirable, vitamin C and iron should be taken at the same time.
4. Explain that anorexia and sore mouth often accompany anemia. If this is a problem, suggest frequent, small meals of easily digested food and the avoidance of hot spicy foods. Refer to a registered dietitian for MNT as appropriate.
5. Discuss that pica (the ingestion of dirt or other non-food substances) may be both a symptom and a cause of anemia.

AN-PRO PROCEDURES

OUTCOME: The patient/family will understand the proposed procedure(s), as well as, the risks, benefits, and alternatives to the proposed procedure(s).

STANDARDS:

1. Explain the specific procedure(s) to be performed, including the risks and benefits of performing the procedure and the adverse events which might result from refusal of the procedure.
2. Discuss alternatives to the proposed procedure(s), including expectant management, as appropriate.
3. Discuss the expected patient/family involvement in the care required following the proposed procedure(s).

AN-TE TESTS

OUTCOME: The patient/family will understand the test(s) to be performed, the potential risks, the expected benefits, and the risks of non-testing.

STANDARDS:

1. Explain test(s) that have been ordered (explain as appropriate):
 - a. method of testing
 - b. necessity, benefits, and risks of test(s) to be performed
 - c. any potential risk of refusal of recommended test(s)
 - d. any advance preparation and instructions required for the test(s)
 - e. how the results will be used for future medical decision-making
 - f. how to obtain the results of the test
2. Explain test results:
 - a. meaning of the test results
 - b. follow-up tests may be ordered based on the results

- c. how results will impact or effect the treatment plan
- d. recommendations based on the test results

AN-TX TREATMENT

OUTCOME: The patient/family will understand the possible treatments that may be performed based on the test results.

STANDARDS:

1. Discuss the treatment for this patient's anemia. Explain that the treatment of severe anemia may include transfusions of red blood cells.
2. Explain that once the hemoglobin levels return to normal, therapy for iron-deficiency anemia should continue for the prescribed duration to replenish the body's depleted iron stores
3. Explain that some anemia cases require long-term or lifelong treatment and others may not be treatable.