

## QUESTION 1

**What would you prescribe for your older female patient diagnosed with iron deficiency anemia as first-line treatment?**

The first line of treatment for iron deficiency anemia (IDA) is oral iron therapy. Ferrous sulfate 325 mg (65 mg of elemental iron) twice or three times a day. More severe cases will require 100-200 mg of elemental iron. There are no guidelines with regards to dosage in older adults but studies revealed that lower doses achieved the same results with fewer side effects.

## QUESTION 2

**Describe two ways that iron deficiency anemia can occur.**

Twenty seven percent of the population worldwide is affected by anemia. Sixty percent of the anemia cases in the world are caused by IDA. IDA occurs in two to five percent of postmenopausal women and adult men in developed countries. IDA can occur due to inadequate intake, decreased absorption, increased demand, or increased loss of iron.

Decreased oral intake or inadequate diet, especially in older adults, can result in anemia. Inadequate nutrition like caloric and protein restriction results in decreased iron in the body.

Helicobacter pylori infection can cause decreased iron absorption and can also cause micro erosion that leads to bleeding and may result in IDA.

## QUESTION 3

**Albert, your 89-year-old male patient, was diagnosed with CLL, chronic lymphocytic leukemia. Describe the incidence, most common age affected, and gender**

CLL is a common disease in the elderly and is the most common leukemia in the adult population in the Western world. CLL accounts to about 25% of adult leukemias and about 25% of non-Hodgkin's lymphoma. The disease is extremely rare in the pediatrics population and also rare under adults under 40 years. Average age of CLL cases is 71 years and men are more likely to have this condition as compared to women.

## QUESTION 4

**Describe at least four methods by which an older person can develop iron deficiency anemia.**

IDA can occur due to inadequate intake, decreased absorption, increased demand, or increased loss of iron. While increased demand is common in children and pregnant women, insufficient dietary iron intake, gastrointestinal malabsorption and/or increased blood losses are the most common causes of ID in older individuals.

IDA due to poor nutrition (decreased oral intake or inadequate diet) is one of the obvious contributing factor of IDA in the elderly. Inadequate nutrient intake due to poor dentition (decrease red meat consumption results in