What is Anemia?

Anemia is a medical term which means that a person does not have enough red blood cells or hemoglobin in their body. Hemoglobin is the protein in red blood cells that carries oxygen to all parts of the body. Anemia is a common blood disorder. It can be a temporary or a long-term condition. It can range from mild to severe. People with mild anemia may not have any symptoms or only mild symptoms. Symptoms can include weakness, fatigue, shortness of breath, headache and difficulty with thinking or concentration. In order to confirm anemia a blood test is needed.

How common is anemia in surgery patients?

Depending on the type of surgery, anemia can be seen in 5-75% of patients. This depends on the overall health of each patient. After surgery, anemia is even more common, affecting 90% of patients.

What causes anemia in surgery patients?

Anemia may be present before surgery in people who have chronic diseases or cancer. The most common form of anemia is due to iron deficiency which can be a result of not enough dietary iron, blood loss such as heavy menstrual cycles, disease or medications. Women, children, vegetarian and the elderly are at risk for iron deficiency anemia.

What are the side effect of untreated anemia in surgery patients?

Patients who have anemia before surgery are more likely to need blood transfusions, have a higher risk of infection, and have longer hospital stays than those who do not have anemia. Appropriate management of anemia prior to surgery may be life-saving in some circumstances.

How do I know if I have anemia?

The best way to find out if you have anemia is to talk to your health care provider. They can perform tests, such as a complete blood count (CBC) to check if you have anemia.

It is important to see your doctor to check for anemia while waiting for elective surgery. Know your blood number:

<table>
<thead>
<tr>
<th>NORMAL HEMOGLOBIN RANGE</th>
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<tr>
<td><strong>Male:</strong> 140-180 g/L</td>
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<tr>
<td><strong>Female:</strong> 120-160 g/L</td>
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How is Anemia treated?

Treatment of anemia varies and depends on the cause. Health Care Providers will recommend treatment for each individual.

- Iron Deficiency Anemia - is treated with iron supplements. This may require several month (or longer) of treatment. If the underlying cause of iron deficiency is blood loss, the source of the bleeding must be located and stopped.

- Vitamin Deficiency Anemia - include pernicious anemia which is treated with vitamin B12 supplementation. Folic Acid deficiency anemia is treated with folic acid supplementation.
• Anemia of Chronic Disease - there is no specific treatment for this type of anemia. Doctors focus on treating the underlying disease. In the pre-operative patient, injections of erythropoietin may be beneficial.

• Other anemia’s - other types exist and require the expertise of blood specialist doctors (Hematologists).

Can Anemia be prevented?

Many types of anemia can’t be prevented. However, iron deficiency anemia and vitamin deficiency anemia’s can be avoided by eating a healthy, balanced diet that includes foods rich in iron, folate and vitamin B12. It is often difficult to meet the daily requirement for iron. Sometimes a multivitamin with iron is beneficial.

Adequate iron stores PRIOR to surgery have been demonstrated to improve your post-operative recovery from anemia.

What should I do while waiting for surgery?

If you are anticipating surgery, talk to your doctor about your hemoglobin count. Discuss ways you can build your strength and increase blood counts before the operation.

Should I take Iron pills?

Some people are at a risk for iron overload which is why you should discuss iron supplementation with your doctor first. There are different kinds of iron supplements—it may take you a few tries to find the best one. They are found behind the Pharmacists counter—please ask for their assistance.

Tips on Taking Iron Supplements:

Iron is best absorbed on an empty stomach; however, iron supplements can upset your stomach. Try

• Starting slowly and gradually increase the daily dose,
• Taking with a little bit of food
• Taking with citrus juice such as orange juice to increase absorption

Iron absorption is reduced when taken with coffee or medications such as antacids, Zantac, Losec, Vitamin E, and calcium supplements.

Iron supplements can cause constipation; consider increasing fluid and fiber in your diet or ask the doctor/pharmacist for a stool softener.

REFERENCES
