Anemia & Heart Disease

Anemia is a level of hemoglobin or hematocrit which is lower than normal. Hemoglobin is the substance in red blood cells that carries oxygen to all parts of your body. Hematocrit is a reading which is the percentage of your blood which is made up of red blood cells. Anemia can be temporary or it can be caused by long term disease or illness. People with mild anemia may not have symptoms or may have only mild symptoms. People with severe anemia can feel tired, get short of breath with activity, and have problems with daily activities. Many large studies have shown anemia is common in 17% to 48% of people with heart failure. One study showed that 43% of people who were hospitalized after a heart attack had anemia.

CAUSES

Anemia occurs when your body has a below-normal level of hemoglobin, which in turn prevents your body from getting enough oxygen. In certain cases, this lower level of oxygen causes your heart to work harder. These effects on your heart can make you susceptible to heart disease or worsen existing heart disease.

SYMPTOMS

Most people do not realize they are anemic until a blood test shows a low hemoglobin or hematocrit. Symptoms and signs usually develop when anemia is moderate to severe, and can include:

- Fatigue
- Chest pain.
- A fast heartbeat.
- Numbness or coldness in your hands and feet.
- Weakness.
- Dizziness.
- Headaches.
- Pale skin.
- Irritability.
- Trouble breathing.

If untreated, anemia in heart disease can lead to severe chest pain. Pain occurs because parts of the heart are not getting enough oxygen. As the heart works harder due to lack of oxygen, the muscles in the left lower chamber can get too thick. This can result in a condition called left ventricular hypertrophy. If this is untreated it can worsen heart disease and increase the chance of heart failure. The presence of anemia increases the death rate in people with heart failure and those who have had a heart attack. The death rate is especially high in anemic people with heart failure who also have kidney disease and/or diabetes.

DIAGNOSIS

Your caregiver will provide the treatment that is best for you based on what is causing the anemia.

TREATMENT

Close communication with your caregiver will ensure you will receive the best anemia treatment available.

Normal Lab Values:

Normal hemoglobin is greater than 12 g/dL for women; with a hematocrit which is greater than 36%.
Normal hemoglobin is greater than 14 g/dL for men; with a normal hematocrit which is greater than 42%.

GLOSSARY OF TERMS

Hemoglobin: Substance carried by red blood cells; delivers oxygen throughout your body
Hematocrit: Percentage of red blood cells in a blood sample
Heart failure: Condition that causes weakening of the heart muscle and can not pump enough blood to the body.

This can cause fluid retention (swelling of the feet, fluid in lungs, shortness of breath, and other symptoms)
Left ventricular hypertrophy: Enlargement of the left chamber of the heart

This information is courtesy of the National Anemia Action Council. For more information see www.anemia.org.

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