Focus On Anemia

Living Healthy. Living Well.

Ask yourself these questions:

- Why do patients with kidney disease develop anemia?
- What are the symptoms of anemia?
- How is anemia tested?
- How is anemia treated?

If you are not sure or do not know the answers to these questions,

READ ON!

Anemia is a common complication of Chronic Kidney Disease. This is, in part, due to the decreased production of a hormone called erythropoietin. Erythropoietin is needed to stimulate our bone marrow to produce red blood cells. As the kidneys deteriorate, their ability to produce adequate erythropoietin is impaired, resulting in decreased production of new red bloods. Toxins that build up, as a result of kidney failure, also can shorten the lifespan of red blood cells.

Symptoms of Anemia:

- Tiredness
- Little energy for daily activities
- Poor appetite
- Trouble sleeping or thinking clearly
- Dizziness or headaches
- Rapid heartbeat
- Shortness of breath
- Depression

In addition to these symptoms, the effects of anemia can cause other potentially serious medical complications. These include:

- Left Ventricular Hypertrophy (LVH) – enlargement of the heart:
  When the number of red blood cells decreases, the heart works harder to pump blood to send more oxygen throughout the body. If the heart works too hard, it can develop a rapid or irregular heartbeat, and/or LVH. This enlargement of the heart muscle can lead to heart failure.

Testing for Anemia:

- The best way to check for anemia is to check your hemoglobin (Hgb) level from a blood sample
  - Hemoglobin is the part of red blood cell that carries oxygen throughout your body
  - Targeted levels for dialysis patients are 10.0 to 12.0 mg/dL.
  - Your hemoglobin level is tested from a blood sample once a month in the dialysis unit, more often if changes are necessary.

Treating Anemia:

Depending on the cause, anemia can be treated with:

- Dietary changes to include an increased intake of foods rich in iron, folic acid and vitamin B12
- Supplements of iron, vitamin B12 or folic acid (prescribed by doctor)
- Increased physical activity/exercise
- Injections of a man-made hormone called erythropoietin (**EPOGEN**) to help your body make enough red blood cells. (Usually administered IV or with a shot in the arm –subqutaneous - during your dialysis treatment).
- Rarely, blood transfusions

EPOGEN:

- Usually administered during each dialysis treatment
- Dosage and frequency is determined by your hemoglobin level
- Very few, if any, side effects noted with Epogen
- Usually you will receive Epogen for as long as you are on dialysis. A smaller maintenance dose will usually be given even after you have achieved a hemoglobin level of close to 12.0. Once your hemoglobin reaches 12.0 or greater, Epogen may be reduced or discontinued.
- Epogen needs iron to do its job. You may need supplemental IV iron, periodically, to keep your iron stores at an effective level. IV Iron is given during your dialysis treatment, when needed.

Please take a moment to answer these True/False questions with your Primary Nurse.

1. One of the main causes of anemia in chronic kidney failure is the absence of the hormone erythropoietin.	True	False
2. Anemia is detected by checking blood pressure.	True	False
3. Your Hemoglobin level should be greater than 10.0.	True	False
4. IV Iron is often needed to boost iron stores during Epogen therapy.	True	False
5. Exercise helps prevent anemia.	True	False
6. Anemia could lead to heart problems.	True	False
7. Epogen is given only when your Hemoglobin is below 10.0.	True	False