Intermountain® Healthcare

Polycythemia vera

What is it?

Polycythemia vera (pronounced pahl-ee-sy-thee-me-a vare-a), also called polycythemia, is a condition in which your bone marrow makes too many blood cells, especially red blood cells. When you have too many red blood cells, your blood thickens. This increases your risk for several serious health problems.

With treatment, most people have very few problems. If polycythemia is not treated, however, it can be life threatening.

What causes it?

Polycythemia is caused by a change in the protein cells in your bone marrow. Researchers don't yet know what causes the cells to change. The change occurs more often in men than women, and mostly in patients over 40 years old. Sometimes it runs in families, so there may be genetic factors.

How is it diagnosed?

Because polycythemia is uncommon and develops slowly, you may have it for several years before it is diagnosed. It usually shows up during a blood test. If the blood test shows signs of polycythemia, your doctor may confirm the diagnosis with other tests, such as a bone marrow test or a genetic test.

What are the symptoms?

Some people don't notice many symptoms, even after diagnosis. When there are noticeable symptoms, they may include:

- Trouble breathing when you lie down
- Shortness of breath
- Headache
- Dizziness
- Itchiness, especially after a bath or shower
- Red skin, especially in the face
- Numbness, tingling, burning, or weakness in the hands, feet, arms, or legs
- A feeling of fullness in the left upper abdomen

Most of these symptoms are caused by poor circulation and thickening and clotting of the blood.

How is it treated?

Polycythemia cannot be cured. The goal of treatment is to thin your blood. This will help prevent symptoms and complications. Treatments include:

- Drawing blood (also called **phlebotomy**). Blood is removed every week or so until your blood levels become more normal. Having less blood improves your circulation.
- Medication to reduce the number of red blood cells you produce.
- Medication to thin the blood, such as low-dose aspirin.

What if it goes untreated?

If polycythemia goes untreated it can cause your blood to thicken. This can put you at risk for a number of problems, including:

- Blood clots, which make you more likely to have a stroke, a heart attack, or a blocked artery in your lungs or in a deep muscle.
- Bleeding from the stomach or other parts of the intestinal tract.
- Joint pain caused by inflammation (gout).
- Enlarged spleen, possibly requiring it to be removed.
- Other blood or bone marrow problems. These are rare.

What can I do about it?

Polycythemia affects your circulation. The most important things you can do, then, are to try to improve your circulation and protect your skin. Follow these recommendations:

- **Exercise** to improve your circulation and decrease the risk of blood clots.
- **Quit smoking.** Tobacco narrows your blood vessels and increases the risk of clotting.
- **Care for your skin.** Poor circulation can make sores heal slowly.
- **Avoid extreme temperatures**. Poor circulation can make you more vulnerable to extreme temperatures.

When should I call my doctor?

Polycythemia increases your chance of stroke. **Call 911 right away** if you experience any of the following signs of stroke:

- Sudden numbness or weakness of your face, arm, or leg
- Sudden difficulty speaking
- Sudden blurred or decreased vision
- Sudden dizziness or loss of balance
- Sudden severe headache

Contact your doctor if you have any of the symptoms of polycythemia listed on the first page of this fact sheet.