What Is Polycythemia Vera (PV)?

Ruben Mesa, MD
Deputy Director, Mayo Clinic Cancer Center
Mayo Clinic

Carol Preston:
Dr. Mesa, tell me exactly what is polycythemia vera?

Dr. Mesa:
Polycythemia vera literally means too many red blood cells. What it describes is a blood disease that is known as a myeloproliferative neoplasm. It's a disease of the bone marrow that typically is found when an individual has too many red blood cells in their bloodstream, sometimes along with too many white blood cells and too many platelets. It's a blood disease where we think there are changes in the genes that control the creation of cells that lead to this overproduction, with that key genetic change being a change in the gene JAK2.

This leads to a variety of issues both in the short term and the long term. In the short term, there can be risks of blood clots and bleeding. There can be the risk of enlargement of the spleen, an organ that filters the blood, and there can be the development of very significant symptoms.

It's a disease that we view as a chronic disease. Patients can have it for a very long time. Some patients may have it their whole lives, and we control or manage the disease like we might other diseases, such as diabetes or hypertension or difficulty with cholesterol.

There is a risk that the disease can progress. It's a disease that we monitor carefully. We have some effective therapies, and much research is ongoing.