



FACTS ABOUT MYELOFIBROSIS (MF) (my-ah-lo-fye-BRO-sis)

WHAT IS MF?

MF is a specific type of myeloproliferative neoplasm, or MPN. It is a rare blood cancer in which scar tissue forms in the bone marrow and impairs its ability to produce normal blood cells.

MF is a serious chronic condition, and it is progressive—meaning that it will likely get worse over time.

HOW IS MF DIAGNOSED?

Healthcare Professionals can diagnose MF using certain tests. These include blood tests, ultrasound or MRI, bone marrow biopsy, and genetic testing.

HOW COMMON IS MF?

About 16,000 to 18,500 people in the United States have been diagnosed with MF. MF affects both men and women. It can occur at any age, but people are usually over age 50 when they are diagnosed.

WHAT CAUSES MF?

MF may be associated with changes in certain genes, called mutations. Between 50% and 60% of people with MF have a specific mutation of the Janus kinase 2 (*JAK2*) gene.

In MF, the bone marrow produces abnormal cells due to a mutation in the DNA. As the cells divide, they pass along the mutation to the new cells.

Eventually, abnormal cells crowd out normal, healthy cells and disrupt the production of red and white blood cells and platelets.

WHAT ARE THE SIGNS AND SYMPTOMS OF MF?

About one third of MF patients have no symptoms at diagnosis. When the bone marrow cannot make enough normal blood cells, the spleen can begin to make them. This causes the spleen to enlarge. At least 85% of people with MF have an enlarged spleen when they are diagnosed.

An enlarged spleen may cause some symptoms of MF, including:

- Pain or discomfort in the abdomen or under the left ribs
- Early feeling of fullness
- Undesired weight loss

Other symptoms of MF are fatigue, night sweats, bone/muscle pain, itching (pruritus), abdominal/back pain, gout, fever and shortness of breath.

WHAT OTHER HEALTH PROBLEMS CAN MF CAUSE?

MF can also cause more serious complications, including:

- Heart attack or stroke
- Infections
- Increased pressure on blood flow to the liver (portal hypertension)
- Bleeding complications
- Progression to leukemia

WHAT IS THE PROGNOSIS?

In patients with MF, the prognosis (or how MF may progress) can vary a great deal. Each patient's prognostic risk factors should be evaluated individually and discussed with Healthcare Professionals.

Factors that may influence the prognosis for MF include:

- Being over age 65
- The presence of certain symptoms
- Having a higher than normal level of certain types of white blood cells
- Having a lower than normal level of platelets (thrombocytopenia)
- Having lower than normal level of red blood cells (anemia)

HOW IS MF MONITORED?

It is important that people with MF see their doctor regularly for blood work and monitoring to help detect any changes in the condition.

New or worsening symptoms should be reported to a Healthcare Professional.

WHAT'S YOUR **MF STATE OF MINE?**

If you are living with MF, your symptoms, blood counts, and even your feelings can help you identify your **MF STATE OF MINE**—or where you are on your journey with MF. To learn more, visit VoicesOfMPN.com.

