

# **MANAGING YOUR MYELODYSPLASTIC SYNDROME**

## **What Is Myelodysplastic Syndrome?**

Myelodysplastic syndrome (MDS) refers to uncommon conditions with abnormal bone marrow cells. It is often a precursor to acute leukemia. Bone marrow is the spongy material inside bones where blood cells are made. These blood cells are poorly formed or don't work normally. The five subtypes of MDS include types I and II, with anemia that's hard to manage (refractory anemia). The other three types have too many blasts (immature blood cells in bone marrow). The higher the percentage of blasts, the faster leukemia develops. With time, about 30% of people get acute leukemia. MDS occurs most often in people older than 60, more men than women.

## **What Causes Myelodysplastic Syndrome?**

In most cases, the cause is unknown. Chemotherapy and radiation therapy can lead to increased risks of getting MDS. It can run in families.

## **What Are the Symptoms of Myelodysplastic Syndrome?**

About half of people have no symptoms. The most frequent one is fatigue due to anemia (low red blood cell count and hemoglobin). Two-thirds of people also have a low white blood cell count or platelet count. Easy or unusual bruising or bleeding and pinpoint-sized red spots just under the skin, caused by bleeding (petechiae), can occur. Other symptoms seen with severe anemia include pallor, and shortness of breath with exertion. Low platelet counts can lead to bleeding. The main risk of low white blood cell counts is serious infections.

## **How Is Myelodysplastic Syndrome Diagnosed?**

The health care provider may suspect MDS from the medical history, physical examination, and blood tests. The doctor will review a blood smear and do a biopsy and examine the bone marrow. In a biopsy, the doctor removes a small sample of marrow from a bone and checks it with a microscope. Special genetic analysis of bone marrow cells helps diagnose those who have a poor prognosis.

### **How Is Myelodysplastic Syndrome Treated?**

Bone marrow transplantation is a good option and can cure some younger people (age 60 and younger) with a good prognosis. Combinations of chemotherapy and medicines (including growth factors) can cause remissions and help symptoms in others who are not candidates for bone marrow transplantation.

Supportive care is best for most people. This involves regular transfusions and antibiotics for suspected bacterial infections. Transfusions with red blood cell and platelet concentrates support people with low blood cell counts. Chemotherapy can lead to remissions, but remissions are often temporary. Using erythropoietin can reduce the number of transfusions needed.

### **DOs and DON'Ts in Managing Myelodysplastic Syndrome**

- ✓ **DO** consider transplantation of bone marrow, from a close relative or suitable unrelated donor.
- ✓ **DO** get hepatitis vaccinations if you're undergoing transfusions, and after transplantation.
- ✓ **DO** use medical alert identification.
- ✓ **DO** avoid large crowds and people who have signs of infections if you have a low white blood cell count.

- ✓ **DO** call your health care provider if you have fever, bleeding, chest pain, or dizziness.
- ⊗ **DON'T** use aspirin and aspirin-like medicines. They can make bleeding worse. Some other medicines can lower blood counts. Check with your health care provider.
- ⊗ **DON'T** eat fresh vegetables and fruit, cheese, and yogurt if you have a low white blood cell count.
- ⊗ **DON'T** do moderate and strenuous exercise if you have severe anemia.
- ⊗ **DON'T** do activities that may involve trauma (such as football) if you have a low platelet count.

FROM THE DESK OF

NOTES

FOR MORE INFORMATION

Contact the following sources:

- American Cancer Society: Tel: (800) 227-2345; Website: <http://www.cancer.org>
- National Cancer Institute: Tel: (800) 422-6237; Website: <http://www.cancer.gov>

Copyright © 2021 by Elsevier, Inc.