# **Understanding Infections**

Multiple myeloma is a cancer of the blood. But it may affect many parts of your body. This information will help you understand infections and why they may occur in patients with multiple myeloma.

#### **KEY POINTS**

- 1. People with multiple myeloma are about 15 times more likely to get an infection than people without multiple myeloma
- 2. Checking for infection is important. Multiple myeloma patients who get an infection often respond slowly to treatment of the infection
- 3. You are part of your healthcare team. Work together with your healthcare team to help prevent infection

#### **MULTIPLE MYELOMA: A REVIEW**

Multiple myeloma is a cancer of the blood. But it may affect many parts of your body. This information will help you understand infections and why they may occur in patients with multiple myeloma. Let's first review multiple myeloma.

Multiple myeloma is a cancer that starts in the bone marrow, which is the soft, spongy center of certain bones. Red blood cells, white blood cells, and platelets are formed inside the bone marrow.

Multiple myeloma affects a type of white blood cell, called plasma cells. Normally, plasma cells make antibodies, which help fight infection. But in multiple myeloma the plasma cells become abnormal and grow out of control.

Multiple myeloma:

- Does not allow enough healthy red blood cells, healthy white blood cells, and healthy
  platelets to develop in the bone marrow
- Causes bone to break down faster than it should, allowing soft spots in the bone to form
- Produces large amounts of an antibody called a monoclonal (M) protein, which cannot fight infections

## **MULTIPLE MYELOMA AND INFECTION**

White blood cells, including plasma cells, are part of your immune system, which protects you from infection. Abnormal plasma cells do not protect you from infection because they:

- Produce a large amount of M protein, an antibody that does not fight infection
- Build up in the bone marrow, crowding out healthy white blood cells that usually fight infection

Additionally, certain treatments may affect your body's ability to fight infections.

#### UNDERSTANDING INFECTION

- Checking for infection is important
- Patients with multiple myeloma are about 15 times more likely to get an infection than people without multiple myeloma
- Your doctor may prescribe an antibiotic or other drugs to help prevent or fight infections.
   Additionally, talk to your doctor about any vaccines that may be right for you to help reduce your risk for infection
- · Multiple myeloma patients who get an infection often respond slowly to treatment of the infection

### SYMPTOMS OF INFECTION

Infections can develop when you do not have enough healthy white blood cells to make infection-fighting antibodies.

Be alert for any of these signs of infection:

- Fever above 100.5°F, chills, or sweating
- Flu-like symptoms such as body aches and fatigue, with or without fever
- · Cough, shortness of breath, pain when breathing
- · Sore throat or sores in the mouth
- · Redness, pain, or swelling on any area of your skin
- · Pus or drainage from open cuts or sores
- · Pain or burning during urination

It is important to work with your healthcare team. Talk to your doctor or nurse about the symptoms of infection listed above.

#### TAKE CARE OF YOURSELF

Take charge of your health by taking these steps to help prevent infection:

- Avoid large crowds of people to reduce your risk of exposure to an infection, particularly at times when your doctor says you may be at greatest risk
- Avoid people who show signs of being sick
- Cook food thoroughly, and wash fruits and vegetables
- Talk with your doctor or nurse about precautions you should take while traveling
- Most importantly: Wash your hands! Keep your hands clean to reduce your risk of infection. Wash with water and soap or an antiseptic soap solution

You are part of your healthcare team. Work together with your healthcare team to help prevent infection.



# **Understanding Infections**

#### FOR MORE INFORMATION

For more in-depth information about infection, including tips and tools for helping to prevent infections, consider this resource:

**3 Steps Toward Preventing Infections During Cancer Treatment** (a CDC Foundation Website)

Information about these independent organizations is provided as an additional resource for obtaining information related to multiple myeloma. It does not indicate endorsement by Celgene Corporation of an organization or its communications.

Your healthcare team is your best source of information.

