Multiple Myeloma: Introduction

What is cancer?

Cancer starts when cells change (mutate) and grow out of control. Your body is made up of tiny building blocks called cells. Normal cells grow when your body needs them, and they die when your body does not need them any longer.

Cancer is made up of abnormal cells that grow even though your body doesn't need them. In most cancers, these cells grow to form a lump or mass called a tumor. If cancer cells are in the body long enough, they can grow into (invade) nearby areas. They can even spread to other parts of the body (metastasis).

What is multiple myeloma?

Multiple myeloma is cancer that starts in plasma cells in your bone marrow. This is the soft, inner part of some bones where new blood cells are made.

Plasma cells are part of your immune system. They make proteins called antibodies to help fight infections and diseases. Plasma cells are found mainly in the bone marrow.

In multiple myeloma, mutated plasma cells go through a series of changes. This can eventually cause excess cell growth. It can also cause tumors to form in your bones. Along with bone tumors, multiple myeloma can also cause other health problems. These include having too much calcium in your blood, low blood cell counts, kidney problems, and frequent infections.

How multiple myeloma starts and grows

Changes that occur in plasma cells can lead to tumors called plasmacytomas. These tumors most often start in bones. In rare cases, they can start in other parts of your body. A small number of people have only a single tumor. This is called a solitary plasmacytoma. More often, people have tumors in many different bones. This is known as multiple myeloma.

Multiple myeloma can cause a number of different health problems. For instance:

- Bone tumors can lead to bone pain and fractures.
- Bone tumors can cause too much calcium to enter the blood (hypercalcemia). This can lead to symptoms, such as intense thirst, urinating often, and constipation.
- The cancer cells can crowd out the normal cells in the bone marrow. This can lead to low levels of normal blood cells (red blood cells, white blood cells, and platelets). This can lead to problems, such as weakness or tiredness, having an increased risk of infections, and bleeding.
- Myeloma cells make too much of a certain antibody known as an M protein. This enters your blood and can damage the kidneys and other organs.

Talk with your healthcare provider

If you have questions about multiple myeloma, talk with your healthcare provider. They can help you understand more about this cancer.