

Editorial Note on Bone Marrow Cancer

Radhika S*

Walchand centre of biotechnology, Solapur, Maharashtra, India

Corresponding Author*

Radhika S

Walchand centre of biotechnology, Solapur, Maharashtra, India

E-mail: radhikasr@gmail.com

Tel: +8657353795

Copyright: 2021 Radhika S, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Received 22 Feb 2021; Accepted 25 Feb 2021; Published 25 Feb 2021

Editorial Note

The plasma cells are a type of white blood cell in the bone marrow. With this condition, a group of plasma cells becomes cancerous and multiplies. The disease can damage the bones, immune system, kidneys and red blood cell count. Symptoms may not be present or may be non-specific, such as loss of appetite, bone pain and fever.

Treatments include medication, chemotherapy, corticosteroids, radiation or a stem-cell transplant.

Marrow is the sponge-like material inside your bones. Located deep within the marrow are stem cells, which can develop into red blood cells, white blood cells, and platelets.

Bone marrow cancer happens when cells in the marrow begin to grow abnormally or at an accelerated rate. Cancer that starts in the bone marrow is called bone marrow cancer or blood cancer, not bone cancer.

Types of bone marrow cancer:

Multiple myeloma

The most common type of bone marrow cancer is multiple myeloma. It starts in the plasma cells. These are white blood cells that make antibodies to protect your body from foreign invaders. Tumors form when your body starts to produce too many plasma cells. This can lead to bone loss and a decreased ability to fight infections.

Leukemia

Leukemia usually involves white blood cells. The body produces abnormal blood cells that don't die off as they should. As their numbers grow, they swarm normal white blood cells, red blood cells, and platelets, interfering with their ability to function.

Lymphoma

Lymphoma can start in the lymph nodes or the bone marrow.

There are two main types of lymphoma. One is Hodgkin's lymphoma, also known as Hodgkin's disease, which starts in specific B lymphocytes. The other type is non-Hodgkin's lymphoma, which starts in B or T cells. There are also many subtypes.

The excess growth of plasma cells interferes with the body's ability to make red blood cells, white blood cells and platelets. This causes anemia and makes you more prone to infections and abnormal bleeding. As the cancer cells grow in the bone marrow, they cause pain and destruction of the bones.

The pathology lab that receives your marrow will check to see if your bone marrow is making healthy blood cells. If not, the results will show the cause, which may be an infection, bone marrow disease, or cancer. Read on to learn more about a bone marrow biopsy and what happens during and after the procedure. Cancer in the bones can cause too much calcium (hypercalcemia) to be released into the bloodstream. This can affect the proper functioning of the heart, kidneys, and muscles. It can also cause neurological symptoms, such as confusion, memory loss, and depression. High calcium levels can lead to coma or death.

A risk factor is something that affects your chance of getting a disease. Different cancers have different risk factors. But just because you're at risk doesn't mean you'll actually get sick. And, most people who do get bone marrow cancer have no known risks. Talk to your doctor about your concerns. Doctors will check your bone marrow to see if it's making normal amounts of blood cells. This is called a bone marrow test. There are two types -- aspiration and biopsy.

In the first type, your doctor takes a small amount of your bone marrow fluid with a needle. That will give them some idea what the problem is. It'll also let them know if you have a fever or infection.

Conclusion

In some cases, a bone marrow or stem cell transplant is an option. Multiple myeloma isn't considered "curable," but symptoms wax and wane. There can be a long period of dormancy that could last several years. However, this cancer usually recurs.

