



ELDERCARE PROGRAMME

MULTIPLE MYELOMA

What is multiple myeloma?

Multiple myeloma is the second most common blood cancer. It is an abnormal growth (tumour) of plasma cells, a type of white blood cell found in your bone marrow (the spongy tissue inside the bone). If there is only one plasma cell tumour, it is called an isolated (or solitary) plasmacytoma. When there is more than one plasma cell tumour, it is called multiple myeloma.

NEWSLETTER

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This sheet is for your general information and is not a substitute for medical advice. You should contact your physician or other healthcare provider with any questions about your health, treatment or care.

Normal plasma cells are an important part of your body's immune system – they make proteins called antibodies that fight against infections. With multiple myeloma, the plasma cells grow out of control and accumulate in the bone marrow where they 'crowd out' healthy blood cells. Instead of producing helpful antibodies, the myeloma cells produce abnormal proteins (paraproteins). This can cause kidney problems and interfere with the production of normal antibodies, leading to immunodeficiency (inability to fight infections).

What are the risk factors for multiple myeloma?

Around 4 800 people in South Africa are diagnosed with multiple myeloma each year. While the cause is unknown, a number of factors are known to increase the risk of developing the condition:

- » **Age** over 65
- » **Race** (more common in black people)

- » **Gender** (more common in men)
- » High levels of **exposure to radiation and/or other harmful substances** at work
- » **Family history.**

What are the symptoms of myeloma?

Myeloma may not cause any symptoms in the early stages of the disease, but when symptoms do occur they can include:

- » **Bone pain** (lower back pain or pain in the ribs)
- » **Weakness and fatigue** due to lack of red blood cells (anaemia)
- » **Kidney problems** caused by the paraproteins produced by the myeloma cells
- » **Repeated infections**, particularly chest infections, due to shortage of white blood cells/antibodies
- » **Loss of appetite, feeling sick, constipation, depression and drowsiness** caused by raised calcium levels in the blood

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- » **Vomiting and weight loss**
- » **Restlessness** caused by not having the correct mineral balance in the blood
- » **Unexplained bruising/abnormal bleeding**, e.g. bleeding gums or nose bleeds due to low blood platelet counts.



HOW IS MULTIPLE MYELOMA DIAGNOSED?

If symptoms suggest that a person might have multiple myeloma, laboratory tests on blood and/or urine, X-rays of the bones and checking of the bone marrow (bone marrow biopsy) are usually done to confirm the diagnosis.



How is multiple myeloma treated?

Once the diagnosis and the stage of myeloma have been determined, your specialist will determine the most appropriate treatment, including:

- **Chemotherapy** – drugs used to destroy or control cancer cells
- **Targeted therapy** – targets specific proteins that are found on/in the cancer cells
- **Steroids** – helps destroy myeloma cells and make chemotherapy more effective
- **Bisphosphonates** – helps to prevent further bone damage, relieve pain and improve quality of life
- **Radiotherapy** – uses high-dose X-rays to destroy cancer cells
- **Surgery** – sometimes needed to strengthen and repair the damaged bones caused by myeloma
- **Symptom/pain control** treatment
- **Stem cell transplant** to replace the cancerous cells with new, healthy ones
- **Maintenance therapy** to help prolong the time that the condition is under control.

CONCLUSION

Multiple myeloma is a rarely curable disease, but treatable. Treatment can be very effective at controlling symptoms and stopping the development of the disease. The type of treatment you will be offered will depend on a number of factors, including your general health and how advanced the myeloma is.

REFERENCES

1. MACMILLAN CANCER SUPPORT. *Myeloma*. Website. <http://www.macmillan.org.uk/Cancerinformation/Cancertypes/Myeloma/Myeloma.aspx>
2. VELCADE. *What is multiple myeloma?* Website. <http://www.velcade.com/What-velcade-treats/Multiple-myeloma>
3. AMERICAN CANCER SOCIETY. 9 March 2015. *What is Multiple Myeloma?* Website. <http://www.cancer.org/cancer/multiplemyeloma/detailedguide/multiple-myeloma-what-is-multiple-myeloma>
4. CASSIDY, J et al. 2010. *Myeloma*. *Oxford Handbook of Oncology*. 3rd ed. p568.

