Multiple myeloma guidelines asco

ON THIS PAGE: You'll learn more about changes in the body and other things that may signal a problem that may require medical attention. Use the menu to see other pages. People with multiple myeloma may experience various symptoms and signs. Sometimes, people with multiple myeloma don't have any of these changes. For people with myeloma who have no symptoms, their cancer can be detected in blood or urine, which is performed for another reason, for example, for an annual physical examination. Or, the cause of the symptom may be another disease that is not cancer. Anemia is a low level of red blood cells. This occurs when myeloma plasma cells suppress or displace healthy red blood cells. Fatigue is usually caused by anemia or other myeloma-related factors, such as abnormal production of cytokines. This happens in most people with myeloma. Bone pain is a common symptom. Myeloma cells grow in the bone marrow and cortical bone, causing local bone damage or generalized bone thinning called osteoporosis. This makes the bone more likely to break. The back or ribs are the most common places of bone pain, but any bone can be affected. The pain is usually worse when someone moves and at night. If the cancer is found in the spine, the vertebrae (separate bones that make up the spine) may collapse, which is known as a compression fracture. When multiple myeloma progress, a person may lose inches from their height due to compressed vertebrae during their illness. Pain, numbness and weakness can sometimes occur when the collapsed vertebrae click on the spinal cord or a pinch of nerve coming out of the spine. Too much M protein can cause kidney damage or failure, an important issue to be aware of. Early kidney damage often causes no symptoms and can only be diagnosed through blood and urine tests. When the kidneys begin to fail, symptoms include itching, weakness, fatigue, shortness of breath, muscle cramps, nausea, loss of appetite, sleep problems, changes in urination, anemia, and swelling of the legs, legs or ankles. Hypercalcemia is a high level of calcium in the blood that can occur as a result of bone decay. This can lead to drowsiness, constipation, and kidney damage. Symptoms of weight loss, nausea, thirst, muscle weakness and mental confusion are associated with kidney failure, hypercalcemia or other imbalances in blood chemicals. Fever and infections, especially the upper respiratory tract and lungs, can result from lower immunity that people with myeloma. This makes it difficult to fight the infection. Blood clots, nosebleeds, bleeding gums, bruising, cloudy vision, hypervisocity, which thickens with blood, and low platelets are other symptoms of multiple myeloma. If you are concerned about any changes you are experiencing, please talk to your medical team. Health care may ask how long and how often you experience the symptom (s), in addition to other issues. This is to help figure out the cause of the problem, called diagnosis. If multiple myeloma is diagnosed, symptom relief remains an important part of cancer treatment and treatment. This can be called palliative care or supportive care. This often began shortly after diagnosis and continued throughout the treatment. Be sure to talk to your medical team about the symptoms you are experiencing, including any new symptoms or changes in symptoms. The next section in this guide is diagnostics. This explains what tests may be needed to learn more about the cause of the symptoms. Use the menu to select a different section to read in this guide. Scientists still do not know exactly what causes most cases of multiple myeloma. However, they have made progress in understanding how certain changes in DNA can make plasma cells become cancerous. DNA is a chemical that carries instructions almost all our cells do. Some genes (parts of our DNA) contain instructions to control when our cells grow and divide. These genes, which promote cell growth, are called oncogenes. Other genes that slow cell growth or cause cells to die at the right time are called tumor suppressor genes. Cancer can be caused by bugs, or defects, in DNA called mutations that turn on oncogenes or turn off tumor suppressor genes. Recent studies have shown that abnormalities of some oncogenes (such as MYC) develop in the early stages of plasma cell tumors. Changes in other oncogenes (e.g. RAS genes) are more common in myeloma cells in the bone marrow after treatment, and changes in tumor suppressor genes (such as the p53 gene) are associated with the spread to other organs. Myeloma cells also show abnormalities in their chromosomes. In human cells, DNA is packed into chromosomes. Although normal human cells contain 46 chromosomes, some cancer cells may have additional chromosomes (so-called duplication) or all or part of the chromosome is absent (so-called removal). One of the common findings in myeloma cells is that parts of chromosome number 17 are absent. These removals seem to make myel's myel more aggressive and resistant to treatment. In about half of people with myeloma, part of one chromosome has passed with a part of another chromosome in myeloma cells. It's called translocation. When this occurs in an important area near the oncogene, it can turn on oncogene. Researchers found that patients with plasma cell tumors have important abnormalities in other bone marrow cells, and that these abnormalities can also cause excess plasma cell growth. Some cells the brain, called dendritic cells, releases a hormone called interleukin-6 (IL-6), which stimulates the growth of normal plasma cells. Excessive production of IL-6 by these cells appears to be factor in the development of plasma cell tumors. It is difficult to diagnose multiple myeloma early. Often multiple myeloma does not cause any symptoms until it reaches an advanced stage. Sometimes it can cause vague symptoms that at first glance seem to be caused by other diseases. Sometimes, multiple myeloma is found early when a regular blood test shows an abnormally large amount of protein in the blood. People with MGUS (monoclonal gampathy of unknown value) or single plasmocytom are at risk of developing multiple myeloma and have regular blood work to monitor it. Multiple myeloma can be diagnosed earlier in those people than in those who do not have MGUS or single plasmocytoma. Multiple myeloma - a cancer of white blood cells known as plasma cells - can cause a wide range of symptoms as it progresses. But multiple myeloma often has no external signs in the early stages, making it difficult to identify. In fact, 1 in 5 myeloma patients diagnosed with the disease just because they went to the doctor for routine medical examinations and laboratory tests that showed clear changes in blood or urine. (1) Multiple myeloma can be easily ignored, even if there are symptoms, because common signs, such as fatigue, may be associated with other health conditions or even just aging. (2) Signs and symptoms that occur with multiple myelomaA Cancer plasma cells multiply in the bone marrow, they show their presence in a number of ways. The main three are usually: Bone pain and bone fractures pain are usually in the spine or ribs, but perhaps in any bone, often is one of the earliest signs of multiple myeloma. Myeloma cells stimulate cells that break bones and suppress cells that build a new bone. This can cause holes in the bones, called lytic lesions, and osteoporosis (thinning of bones). The result can be permanent bone pain that worsens when you move. Fragile bone can sometimes break even from daily activities like lifting, sneezing, walking, or coughing. Fatigue and Weakness This is a common problem for people with multiple myeloma. As cancer becomes more advanced, abnormal plasma cells (also known as myeloma cells) begin to displace other bone marrow cells, including red blood cells. Low levels of red blood cells or low concentrations of haemoglobin - what is known as anemia - can leave you looking pale and make you tire easily or feel weak. Frequent myeloma cell infections compromise the immune system, displacing healthy white blood cells that produce infection-fighting antibodies. (Myeloma cells make non-functional antibodies.) For a lot of people, The symptom of multiple myeloma may be urinary tract, bronchus, lungs, skin or other types of infection. Recurrent infections can also make several myels harder to treat as it progresses. Multiple myeloma can express itself in an even wider range of symptoms. These Are These Include: Numbness, tingling, burning, or pain in the hands and feet of myeloma cells produce an abnormal antibody called M protein (also known as monoclonal immunoglobulin, among other names) that can be toxic to the nerves. This can cause a condition called peripheral neuropathy. Increased thirst and urination, constipation, confusion and kidney damage due to high levels of calcium in the blood When myeloma cells lead to bone decay, the level of calcium in the blood increases, potentially causing a number of problems. (3) Abnormal bleeding, headaches, chest pain, decreased alertness, or shortness of breath These symptoms occur in rare cases of a condition called hyperviscosity syndrome, which occurs when high levels of protein M cause blood to thicken. The abbreviation that doctors use to describe symptoms of multiple myeloma When doctors talk about symptoms of multiple myeloma, they often use the acronym, CRAB:C: Calcium Height (High Calcium Levels in the Blood)R: Kidney Failure (bad kidney function that may be associated with reduced blood flow)A: anemia (low levels of red blood cells) , Doctors have added a number of other criteria that can separate the amptomatic multiple myeloma from the active genus. These criteria include: There are at least 60 percent of plasma cells in the bone marrow. The free light chain ratio (the light chain involved in the unacished light chain) is 100 or more. Antibodies consist of heavy and light protein chains; Free light chains are those that do not bind to heavy chains and are released into the bloodstream. The number of free light circuits corresponds to the amount of plasma in the blood, which may indicate problems with plasma cells. (4) Doctors analyze these chains to compare normal antibodies with abnormal myeloma cells. On magnetic resonance imaging (MRI) there is more than one focal bone lesions (at least 5 millimeters). Watch and wait for an approach to symptom-free multiple myeloma When multiple myeloma has no symptoms, it's called smouldering multiple myeloma (SMM). Despite the appearance, people with SMM are still experiencing some physical changes associated with multiple myeloma. These may include: A large number of plasma cells in the bone marrow A high level of M protein in the blood High levels of light chains in the urine (5) During the first five years after diagnosis, about 10 percent of SMM patients will develop myeloma annually. After that, the risk is reduced to 3 percent to 10 years after diagnosis. (6) Based on these relatively low amounts, doctors tend not to treat SMM, preferring to watch and wait. The standard approach is to monitor the progression of the disease with the help of blood and urine tests, moving on to treatment only when the cancer becomes more advanced. This usually happens even with SMM patients, who seem to be more likely than develop active multiple myeloma based on laboratory assessments and MRI. To question the status quo, the Multiple Myeloma Research Foundation is funding clinical trials to determine whether patients at high risk of SMM are better off with earlier treatment, and what type of treatment is optimal. (6) Seek help from several myelomaV symptoms in addition to treatments that aim to send multiple myeloma into remission by killing cancer cells, so-called supportive treatments seek to reduce symptoms that make cancer harder to treat, harm overall health, and cause pain, discomfort and distress. Therapy includes: Antibody Infusion Patients are struggling with repeated infections due to reduced levels of antibodies can receive regular IV (intravenous) infusions of antibodies from donors. These antibodies are called IVIG, or intravenous immunoglobulin. Blood transfusions of myeloma cells can reduce the number of red blood cells, and anemia, which can lead can leave patients feeling tired and weak. Regular blood transfusions, often given outpatiently, may offer some relief. Plasmapheresis Symptoms such as abnormal bleeding can occur when high levels of the M protein thicken the blood. Plasmapheresis can temporarily fix this. The patient's blood flows through a large catheter placed in a vein in the machine that separates the blood cells from the blood plasma; blood plasma filled with M proteins is discarded and replaced with donor plasma or salt water. (7) (7) asco multiple myeloma guidelines. asco guidelines bisphosphonates multiple myeloma