

FIGURE 4.

HEALTHCARE PROVIDER TIP SHEET: PAIN MANAGEMENT IN MULTIPLE MYELOMA

With improvements in supportive care and treatment, patients with MM are living longer. Because pain is a major symptom of MM, pain prevention and management are important for patient quality of life.

SOURCES OF PAIN

- Bone disease: Osteoporosis, osteolytic bone lesions, pathologic fractures, and/or vertebral compression fractures are common findings at MM diagnosis and throughout the course of the disease.
- Neuropathic pain: Neuropathic pain is not as common as pain caused by bone involvement; however, it can be difficult to treat and influence quality of life. Neuropathic pain can present as PN, which may be present at diagnosis or related to treatment. Postherpetic neuralgia, another cause of neuropathic pain, is a direct result of reactivation of VZV.
- Procedural pain: Throughout their illness, patients with MM undergo multiple procedures that can cause acute pain. Routine blood work and frequent bone marrow biopsies are sources of recurrent, acute pain.

ASSESSMENT, PREVENTION, AND MANAGEMENT

To best treat pain, it is important to perform thorough assessments at baseline and at each encounter. The healthcare team should collect information regarding pain location, intensity, and duration, as well as when it started and what makes it worse or better, including treatments. A physical examination should be performed, and radiologic imaging (i.e., x-ray, magnetic resonance imaging, positron-emission tomography) may be needed to evaluate new musculoskeletal pain.

Medications may be prescribed for bone disease. Anti-myeloma therapy and use of bisphosphonate therapy can treat and prevent bone disease. The use of IV bisphosphonates (pamidronate and zoledronic acid) can reduce pain and prevent skeletal events secondary to bone involvement. Analgesic medications, such as narcotics, may be prescribed to better manage pain and allow for improved mobility. Procedures like local radiation, vertebroplasty or kyphoplasty, or even surgical fixation may be used to treat pain and prevent additional bone damage.

Treatment of neuropathic pain is difficult and, therefore, prevention is important. For patients receiving bortezomib therapy, subcutaneous administration is associated with lower rates of PN than IV administration. Dosing and scheduling adjustments can also be made to prevent worsening of symptoms. Patients

receiving bortezomib or ixazomib therapy should also receive antiviral medication (e.g., acyclovir) to prevent activation of VZV. Pain medications, such as narcotics and other classes of drugs, may be prescribed for acute and chronic pain.

Procedural pain may be difficult to avoid because procedures and interventions are needed for assessment of disease response and activity. Patients may experience pain or anxiety related to procedures. Be sure to discuss the use of premedications to reduce procedural pain and anxiety. When possible, consolidate the collection of blood for different laboratory tests into as few blood draws as possible to minimize the number of painful venipunctures.

TIPS AND REMINDERS

- Remind patients to inform the healthcare team of new onset of pain or pain that is not well managed before they start any self-treatment with over-the-counter medications.
- Assess pain at each visit or encounter.
- Ensure that the primary provider prescribes medications for pain, adjusting doses based on the patient's response.
- If narcotics are prescribed to manage pain, make sure a bowel regimen is also prescribed to prevent constipation.
- If the patient is receiving bortezomib, carfilzomib, or ixazomib as part of the treatment plan, be sure an antiviral medication to prevent shingles is also prescribed.
- Bortezomib given by subcutaneous injection is associated with lower risk of PN than IV administration.
- Physical activity can help with pain management. Consider recommending that the provider prescribe a physical therapy evaluation to promote safe physical activity and strengthening.
- Make sure that the patient receives premedications for painful or anxiety-producing procedures, such as bone marrow biopsy or magnetic resonance imaging.

MM—multiple myeloma; PN—peripheral neuropathy; VZV—varicella-zoster virus
Note. Based on information from Denlinger et al., 2014; Moreau et al., 2011; National Comprehensive Cancer Network, 2017a, 2017b, 2017c, 2017d; Rock et al., 2012; Schmitz et al., 2010.