

Editorial

Optimizing Cancer Pain Care in the Palliative Setting

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“Freedom from pain” has been ranked the most important matter by patients at the end of life [1]. Pain in cancer patients is highly prevalent among various primary diagnoses. It may be as high as 64% in patient with advanced, metastatic or terminal phase cancer [2]. Efforts on maintaining quality of life in patients with terminal illness have become an important focus of end of life care for both patients and care providers. Pain, and the fear of pain, has a major impact on patient function and quality of life. Effective pain management is therefore one of the most important objectives of medical care. Cancer pain is multifactorial and is characterized by multiple, different patho physiological mechanisms that may be nociceptive, neuropathic, or mixed in nature. The different types of pain syndromes are present in all phases of cancer, ranging from early to metastatic stages [3].

There are many options available for pain management in this patient population, some of which are utilized more often than others. Pharmacotherapy is the most widely used option, as a result of the strategy proposed by the World Health Organization (WHO) in 1986. The strategy is based on a sequential three step analgesic ladder from non-opioids to weak opioids to strong opioids. This ladder is still the corner stone of cancer analgesic treatment [4]. However, numerous factors limit the use and effectiveness of pharmacotherapy. Decline in renal and hepatic function, side effects and toxic effects of medications, genetic variability and subsequent variability in response to medications and tolerance to opioids are among the factors that make symptom relief challenging. Close to 50% of cancer patients were undertreated for pain [5].

There are a multitude of interventional pain procedures available for palliative and end of life patients. Unfortunately, many of these procedures are underutilized, especially in this particular patient population. About 10% of cancer patients have pain that is refractory to pharmacotherapy with oral or parenteral analgesic drugs. In this group of patients, an array of interventional pain procedures including neurolytic procedures and intrathecal drug delivery devices may provide improved pain management and reduction in opioids and their side effects. These side effects include but are not limited to constipation, nausea, pruritus, dependence, tolerance and impaired cognitive function, especially in the geriatric population [5]. Neurolytic blocks should be limited to those patients with short life expectancy because they usually produce a block lasting 3–6 months. Patients with pancreatic cancers, colon, rectal, pelvic and anal cancers may benefit from pain relief from a celiac plexus block, superior hypogastric plexus block, and ganglion impar

blocks respectively [6,7]. The most studied of the neurolytic blocks in cancer pain is celiac plexus block for pancreatic cancer [8].

For patients with minimal options to minimize systemic opioid side effects, intrathecal drug delivery systems should be considered early on in the treatment plan. In the intrathecal route, less than 10% of the systemic dose for equianalgesia is required [9]. Patients with wide spread pain is amenable to this option to address pain in various anatomic locations: head and neck, upper and lower extremities and trunk. In general these patients should have a life expectancy greater than 6 months. This method may not be appropriate for patients with infections, uncorrected coagulopathy, or very short life expectancy. A number of pharmacological agents or combination of medications can be delivered intrathecally, including local anesthetics, ziconitide, and opioids. Utilizing multiple medications in conjunction may reduce pain at decreased doses of the medications and decrease side effects of high doses of any one medication. The reduction in opioid side-effects in patients in a randomized control trial where patients were assigned to either medical management versus implantable drug delivery systems were reported to be as high as 50% [10]. In addition to better pain control and less side effects, intrathecal therapy may even lead to better survival, compared with comprehensive medical management [10].

Bone pain in cancer patients is another challenge and it is considered to be one of the most difficult types of pain to treat. The most common primary sources of bony metastases are from lung, breast and prostate cancers. Anywhere from 30–80% of bony metastasis involves vertebrae [11]. Targeted therapy including

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bisphosphonates, radiotherapy, and stereotactic body radio surgery can be beneficial in these cases [3]. Patients with compression fractures from either cancer progression or metastases may benefit significantly from a vertebroplasty or kyphoplasty procedure correcting the vertebral compression fracture and leading to an almost immediate relief of pain [11].

Of paramount importance is coordinated care in the palliative setting. Patients would benefit greatly from early evaluations and consultation from oncology, palliative medicine, pain management, among other related disciplines. Involving interventional pain management physicians early on and informing the patients and families about the available options to manage the pain can be very beneficial. With improving quality of life in mind, care providers must work together to ensure that care is optimized for each patient.

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