

# The Use of Ketamine as Adjuvant Therapy to Control Severe Pain

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Ketamine used in conjunction with other analgesics has dissociative, analgesic, sedative, and amnesic properties. Ketamine potentiates opiates and analgesics, is rapid acting, and is relatively safe. The United Kingdom and United States use ketamine with opioids in adjuvant pain management for a variety of conditions, including cancer pain. Adults and children benefit from the analgesic effects of these medications, especially at the end of life when the reduction of severe cancer pain has refractory or dose-limiting effects. For adults, ketamine and opioids are administered by a patient-controlled analgesia pump. The medication combination has decreased use of opioids and increased activities of daily living. Nursing considerations include close monitoring of vital signs during the initial dosage and follow-up observations of the effectiveness of the medications. Vital signs are checked every four hours after the initial dosage along with evaluation of the effectiveness of the dosage and observation for signs of oxygenation of tissue. Patients have better mobility and quality of life when receiving ketamine as an adjuvant therapy, which promotes assistance with their nursing care. Side effects may occur from administering ketamine and include nausea, vomiting, dizziness, and emotional distress. Standard orders help alleviate problems with those symptoms.

**P**ain is one of the most common and most feared symptoms in patients with cancer (Indelicato & Portenoy, 2003). Severe cancer pain causes physical debilitation, reduces quality of life, and increases as the disease progresses. Therefore, healthcare providers strive for seamless pain and symptom management to ensure better quality of life for patients. Alternative approaches to the treatment of severe cancer pain may be helpful to reduce suffering that results from inadequate pain management.

## Severe Cancer Pain

Cancer pain often is experienced by patients and should be one of the primary considerations in health care. According to Levy (1996), 65%–85% of patients with advanced cancer experience moderate or severe pain. Patients experiencing severe cancer pain may require aggressive intervention strategies, including the use of a variety of medications and therapies to achieve control (Souter, Davies, Loeser, & Fitzgibbon, 2005). Severe cancer pain impacts patients in a variety of ways. Study findings on severe cancer pain from Coluzzi et al. (2001), Enting et al. (2005), Mystakidou et al. (2007), and Portenoy, Taylor, Messina, & Tremmel (2006) had a combined sample of 500 patients with cancer. The studies were conducted in ambulatory and hospital settings, and the results consistently included the following findings.

- Six of ten patients (60%) said they experienced breakthrough pain one or more times daily, severely affecting their quality of life and overall well-being.

### At a Glance

- ◆ Healthcare providers face challenges in providing relief from persistent, unrelieved pain that affects every aspect of patients' lives.
- ◆ Opioids are the standard approach for the highest of the three-tier algorithm treatment for severe cancer pain and often are given in conjunction with nonopioids and non-pharmacologic therapy.
- ◆ Ketamine (Ketalar®, Bedford Laboratories) as an analgesic adjuvant for patients with severe cancer pain is a safe and effective means for pain control and can decrease the need for escalating use of opioids.

- 70% said they had trouble concentrating because of pain.
- 74% said their energy levels were impacted by pain.
- 86% reported an inability to sleep well because of pain.

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Digital Object Identifier: 10.1188/08.CJON.102-107