Managing Breakthrough Pain: A Clinical Review With Three Case Studies Using Oral Transmucosal Fentanyl Citrate

Michelle Rhiner, RN, MSN, NP, Guadalupe Palos, RN, LMSW, DrPH, and Maria Termini, RN, MSN, NPC

Patients with cancer often experience pain. Pain can be related to cancer treatment (surgery, chemotherapy, or radiation therapy), to a tumor itself, or to an unrelated etiology. Patients often experience more than one type of pain, which requires integrating multiple treatment modalities into their plans of care. In patients reporting moderate to severe pain, two components of pain usually are present: persistent pain and breakthrough pain (Portenoy & Hagen, 1989, 1990). Because persistent pain and breakthrough pain are distinct entities that should be addressed individually, correctly assessing pain and developing appropriate pain management plans are challenging.

One patient’s description of her pain serves as an example of the two distinct components of chronic pain. She stated, “[M]y pain is deep and constant, but throughout the day, there is a pain that comes on without warning, and it takes my breath away.”

Pain management begins with the use of appropriate assessment tools and includes planning, implementing, and evaluating a comprehensive treatment plan that addresses persistent and breakthrough pain. Persistent pain is present to some degree throughout the day and primarily is controlled with around-the-clock medication. However, it often is accompanied by episodes of short, intermittent pain, also known as breakthrough pain. From a clinical perspective, breakthrough pain is characterized as a transitory exacerbation of pain that occurs on a background of otherwise stable pain in a patient receiving chronic opioid therapy. Breakthrough pain typically is moderate to severe in intensity and can be triggered by various activities (incident pain), be entirely unpredictable (idiopathic pain), or occur toward the end of around-the-clock medication (end-of-dose failure). Breakthrough pain occurs in as many as 86% of patients with cancer even when persistent pain is well controlled. Clinicians and patients should address persistent and breakthrough pain as distinct entities to accurately assess it and develop appropriate pain management plans. This article provides an overview of the clinical characteristics of persistent and breakthrough pain and, through the use of three case studies, illustrates practical strategies for managing breakthrough pain effectively.

Key Words: pain, pain measurement, palliative care...