

# Oral Transmucosal Fentanyl Citrate for Cancer Breakthrough Pain: A Review

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This article has been chosen as being particularly suitable for reading and discussion in a Journal Club format. The following questions are posed to stimulate thoughtful critique and exchange of opinions, possibly leading to changes on your unit. Formulate your answers as you read the article. Photocopying of this article for group discussion purposes is permitted.

1. Is the article evidence based? Can we assess the level of evidence being presented?
2. Identify at least one patient for whom breakthrough pain was a significant problem.
3. What strategies do our physicians typically use to address breakthrough pain? Is oral transmucosal fentanyl ever ordered?
4. What patient teaching strategies have been employed when this formulation of pain medicine is ordered?
5. Identify three ways to increase the possibility that this formulation of analgesia could be introduced into our setting and, if effective, its use could be encouraged.
6. What management resources would be needed to effectively incorporate the use of this drug in our setting?

At the end of the session, take time to recap the discussion and make plans to follow through with suggested strategies.

**Purpose/Objectives:** To review the dose titration, efficacy, and safety of oral transmucosal fentanyl citrate (OTFC).

**Data Sources:** Phase I and II clinical trial abstracts and evidence-based review articles.

**Data Synthesis:** OTFC has an onset, peak, and duration of action similar to that of an IV dose of an opioid and has been demonstrated to be effective and well tolerated for the management of breakthrough pain in patients with cancer.

**Conclusions:** Studies of OTFC demonstrate that it is easy to use, noninvasive, effective, safe, and acceptable to patients, caregivers, and healthcare providers. However, OTFC is expensive and approved for use only in opioid-tolerant patients with cancer.

**Implications for Nursing:** Breakthrough pain in patients with cancer is a common problem with characteristics that make it difficult to treat. Oncology nurses should familiarize themselves with OTFC's unique characteristics to be able to best help patients manage their therapy.

### Key Points . . .

- Oral transmucosal fentanyl citrate (OTFC) is the only opioid specifically formulated for transmucosal delivery.
- OTFC may work best for breakthrough pain that is paroxysmal, severe, and brief.
- A successful dose of OTFC has no predictors, so each patient should be titrated individually.

patients with cancer (Ashby et al., 1992; Bruera, Fainsinger, MacEachern, & Hanson, 1992; Gomez-Batiste et al., 2002). Three subtypes of breakthrough pain have been defined and include incident pain, idiopathic pain, and end-of-dose failure (see Table 1). The characteristics of breakthrough

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**B**reakthrough pain is a term used to describe a transitory exacerbation of pain that occurs on a background of otherwise stable pain in patients receiving chronic opioid therapy (Portenoy & Hagen, 1990). By definition, breakthrough pain is typically of rapid and paroxysmal onset and brief duration, reaching peak intensity in 3–52 minutes (Fine & Busch, 1998; Portenoy & Hagen; Portenoy, Payne, & Jacobsen, 1999). Although some debate remains about the precise methods of assessment and diagnosis of breakthrough pain (Bennett et al., 2005a; Mercadante et al., 2002), the prevalence of breakthrough pain is reported to be 51%–86% in