

Sublingual fentanyl citrate for cancer-related breakthrough pain: a pilot study.

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Abstract:

The effects of sublingual fentanyl citrate (SLFC) were assessed in 11 hospice inpatients with cancer-related breakthrough pain. Patients were asked to rate their pain, using a visual analogue scale, before SLFC, then after 3, 5, 10, 15, 30, 45 and 60 min. Six patients (55%) had reductions in pain scores at 10 min and nine patients (82%) at 15 min. Ratings for SLFC were very good (18%), good (36%), moderate (28%), and bad (18%). Compared to the usual breakthrough medication, SLFC was better (46%), the same (36%), or worse (18%). Advantages of SLFC included ease of use, quick onset of action and no associated drowsiness. No systemic adverse events were noted, but two patients reported dry mouth and two a bitter taste. Two patients found it difficult to retain the medication under the tongue. Seven patients (64%) said they would continue to use SLFC. Sublingual fentanyl citrate appears safe and well tolerated by these patients. Randomized placebo-controlled and dose ranging studies are required to confirm these findings.

Comments:

Strengths/uniqueness: This study represents the first published evaluation of sublingual fentanyl for the treatment of cancer-related breakthrough pain. Strengths include its prospective design and systematic assessment of outcomes.

Weaknesses: Interpretation of results is limited by the non-randomized and unblinded nature of the study. The definition of breakthrough pain is not entirely clear (i.e. whether patients had controlled baseline pain, and how this was determined). Cognitive status of patients is not described. Only patients with nociceptive pain were included, and baseline opioid doses were low, limiting generalizability of findings.

Relevance to Palliative Care: This study highlights the need to assess breakthrough pain as a phenomenon that is distinct from baseline pain, and to titrate breakthrough analgesic doses independently from baseline analgesic doses. The evidence is preliminary and does not justify first-line use of sublingual fentanyl for treatment of breakthrough pain. However, sublingual fentanyl may be considered when conventional opioid preparations provide inadequate relief, particularly if the breakthrough pain is of rapid onset and short duration.