Safety and effectiveness of intravenous morphine for episodic breakthrough pain in patients receiving transdermal buprenorphine.


Abstract

Supplemental dosing of an opioid is the main treatment suggested to manage breakthrough pain in cancer patients. The intravenous route has been proven to be safe and effective, providing rapid analgesia in patients receiving oral morphine. Transdermal buprenorphine (TTS-BUP) is increasingly used in cancer pain management, but this drug has been labeled as a difficult drug to use in combination with other opioids. The aim of this open-label study was to verify the safety and effectiveness of intravenous morphine (IV-MO) for the treatment of episodic pain in cancer patients receiving TTS-BUP. A consecutive sample of 29 cancer patients, who were treated with TTS-BUP, reported an acceptable basal analgesia, and presented with episodic pains were selected for the study. The IV-MO dose was one-fifth of the morphine equivalent oral daily dose calculated using a ratio of TTS-BUP/oral morphine of 1:75, and a morphine IV/oral ratio of 1:3. For each episode, pain intensity and opioid-related adverse effects were recorded when severe pain occurred (T0), and 15 minutes after. One hundred six breakthrough events in the 29 patients (3.7 episodes per patient, on average) were recorded during admission. The mean pain intensity decreased from an initial value of 7.3 (confidence interval [CI] 95% 7.0-7.5) to 2.9 (CI 95% 2.5-3.3) 15 minutes after IV-MO. Ninety-eight episodes (92.4%) were considered treated successfully, defined as a reduction of more than 33% within 15 minutes; 88 of these episodes (83.0%) had more than 50% pain intensity decrease. No differences in age, gender, pain mechanism, and time of events were found. Eight episodes (7.5%) did not respond effectively within 15 minutes, and required further doses. The occurrence of adverse effects for each episode treated was not frequent and intensity was not relevant. IV-MO was effective and safe in most cancer patients receiving TTS-BUP who experienced pain exacerbation.

PMID: 16877185 DOI: 10.1016/j.jpainsymman.2006.01.013
[PubMed - indexed for MEDLINE]