

Journal Watch

Effectiveness of Topical Administration of Opioids in Palliative Care: A Systematic Review. LeBon B, Zeppetella G, Higginson I. *Journal of Pain and Symptom Management*. 2009; 37 (5): 913-917.

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Abstract: The discovery of peripheral opioid receptors has become the scientific basis for topical use of opioids in malignant and nonmalignant ulcers and oropharyngeal mucositis. This systematic review aimed to assess the quality of published literature and to examine whether topical opioids are effective in controlling pain in palliative care settings. After a systematic literature review, 19 studies (six randomized controlled trials [RCTs] and 13 case reports) met the inclusion criteria for the review. Eighteen studies favoured topical opioids in pain relief, as evidenced by reductions in post-treatment pain scores, but time to onset and duration of analgesia varied widely. Because of the heterogeneity of the studies, meta-analysis was not possible. Despite clear clinical benefits described in small RCTs, there is a deficiency of higher-quality evidence on the role of topical opioids, and more robust primary studies are required to inform practice recommendations. N-of-1 trials should be encouraged for specific clinical circumstances.

Strengths:

Reviewed all available literature with regards to the use of topical opioids.

Most studies used objective measures to evaluate pain relief and time to onset of pain relief.

Weaknesses:

Appraised studies varied in their design (RCT, case study, case series), duration, analgesic, administration interval, wound characteristics and outcome measures.

Available data suffer from limitations inherent in studies in the palliative care setting such as small patient numbers and variability in the patient population.

Relevance to Palliative Care: Painful ulcers are common in bed ridden palliative care patients and they can complicate care. Although more robust studies are needed for standardization of analgesics type, duration, interval and dosage, a trial of topical

opioid can be used as an adjunct to systemic analgesia reduction/cessation in palliative care patients with painful ulcers. The most commonly used topical opioid formulation is morphine sulphate 10mg in 8g Intrasite gel (stable x 28 days).