Opioid rotation in clinical practice.

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Abstract

INTRODUCTION: Although chronic opioid therapy is usually initiated using short-acting opioids, many patients with chronic pain are subsequently converted to long-acting and extended-release preparations. In clinical practice, optimal management requires careful individualization of dosage in order to achieve an appropriate balance of efficacy and adverse effects. After successful initiation and stabilization of opioid treatment, subsequent changes in regimen may still be required to maintain efficacy with an acceptable adverse effect profile.

METHODS: This is a qualitative review of the available literature from June 2012 or earlier on opioid rotation for the management of chronic pain in the clinical setting. The PubMed database was searched using various search terms, and additional articles were identified through manual search of the bibliographies of articles identified through the PubMed search. Papers were selected based on relevance to the topic.

RESULTS: When considering opioid rotation, clinicians must take into account not only the significant differences in potency among opioid drugs but also the considerable interpatient variability in response to opioids. The estimate of relative potency used in calculating an appropriate starting dose when switching from one opioid to another has been codified on equianalgesic dose tables. To reduce the risk of unintentional overdose, a two-step calculation has been proposed, which incorporates an initial reduction (typically 25-50%) in the equianalgesic dose followed by a second evaluation based on the severity of pain at the time of rotation along with other medical or psychosocial factors that might alter the effectiveness and tolerability of the new drug. Given the uncertainty of accurately predicting a patient's response to treatment, each initial exposure to a new opioid should be considered a discrete clinical trial to assess the degree of response. Systematic reviews of opioid rotation have documented the re-establishment of adequate pain control or reduced adverse effects in 50-80% of patients.

CONCLUSIONS: Although continued research is needed to refine equianalgesic doses further, opioid rotation is an important and necessary practice in patients with chronic cancer or noncancer pain that is refractory to the initially used opioid.