The Oncologist®

Opioids for Breakthrough Cancer Pain

Mercadante et al. are to be commended for adding to the science of breakthrough cancer pain in this large, recently published cohort study [1]. The authors described differences in the characteristics of pain and subsequent analgesia with the use of breakthrough medications in 3,892 people with cancer pain on regular low (<60 mg oral morphine equivalent daily [OME]) and high (≥60 mg OME) dose opioids.

The characteristics of breakthrough cancer pain vary from person to person and across populations [2]. The clinical response to breakthrough cancer pain (incident pain, spontaneous pain, or both), once a regular dose of an opioid has been established, has been to prescribe a proportion of the regular dose of (mostly) the same opioid. Despite the ubiquitous nature of breakthrough cancer pain, the evidence remains poor for many key questions about its ideal management [3]:

- What should the proportion of the regular opioid dose be, accounting for any differences in formulation or route of administration?
- What should be the lockout period or dose interval before an additional dose of breakthrough opioid can be given? and
- Should there be a limit on the number of doses that a patient can self-administer in any 24-hour period?

A recent multisite, randomized, double-blind study complements the findings of the study by Mercadante et al. [4]. The study was undertaken to address a long-standing question in the evidence in the clinical literature about the ideal dose of opioid for breakthrough cancer pain [3]. In this study, three different dose proportions (one sixth, one eighth, or one twelfth of the fourth hourly dose) were studied for each person who was established on a regular dose of opioid (morphine or oxycodone) for cancer pain. The findings that the time to analgesia and harms were similar for all three proportions suggest that, from first principles, the lowest effective proportion (one twelfth) should be used, thus refining current recommendations [5].

Standardizing dose proportions in future cohort studies will optimize the ability to compare across differing clinical practices and further progress our understanding of this widespread cause of suffering. In the interim, using the lowest dose to achieve the desired clinical effect while minimizing harms from opioids for pain should direct current practice, given that fewer than one in two people identify benefit when using breakthrough opioids [2].

David C. Currow
IMPACCT, Faculty of Health,
University of Technology, Sydney, Ultimo,
New South Wales, Australia
Australian National Palliative Care Clinical Studies Collaborative,
University of Technology, Sydney, Ultimo,
New South Wales, Sydney, Australia

Katherine Clark
University of Sydney, Northern Clinical School, Royal North Shore Hospital, St Leonard's,
New South Wales, Australia
Australian National Palliative Care Clinical Studies Collaborative,
University of Technology, Sydney, Ultimo,
New South Wales, Sydney, Australia

Disclosures

The authors indicated no financial relationships.

References

1. Mercadante S, Caraceni A, Masedu F et al. Breakthrough cancer pain in patients receiving low doses of opioids for background pain. ***The Oncologist*** 2020;25:156–160.

2. Davies A, Buchanan A, Zeppetella G et al. Breakthrough cancer pain: An observational study of 1000 European oncology patients. J Pain Symptom Manage 2013;46:619–628.

3. Davies AN, Elsner F, Filbet MJ et al. Breakthrough cancer pain (BTcP) management: A review of international and national guidelines. BMJ Support Palliat Care 2018;8:241–249.

4. Currow DC, Clark K, Louw S et al. A randomised, double-blind, crossover, dose ranging study to determine the optimal dose of oral opioid to treat breakthrough pain for palliative care patients established on regular opioids. Eur J Pain 2020;24:983–991.

5. Brant JM, Rodgers BB, Gallagher E et al. Breakthrough cancer pain: A systematic review of pharmacologic management. Clin J Oncol Nurs 2017; 21(suppl 3):71–80.

http://dx.doi.org/10.1634/theoncologist.2020-0280