

Pain Tip Sheet: An Overview of Breakthrough Pain

Breakthrough pain is a transitory flare of pain of moderate to severe intensity occurring on the background of otherwise controlled pain.(1) Up to 60% of cancer patients suffer from episodes known as “breakthrough pain” (2), so anticipating that breakthrough pain may be experienced is important.

A “breakthrough dose”, also known as a rescue dose or rescue medication, is a prn dose of medication used to control breakthrough pain. It does not replace or delay the administration of the regular scheduled pain medication.

Standard management of breakthrough pain is to give an immediate release medication dose on an as needed basis.(3) When appropriate, the breakthrough medication should be the immediate release form of the patient’s regularly scheduled pain medication given by the same route of administration. This will facilitate making any dose adjustments that may be required. (4) An exception to this is the fentanyl patch, where a short-acting opioid is utilized as a breakthrough dose medication.

Helpful Tips:

- When calculating an appropriate breakthrough dose, it is recommended to use either 50 – 100% of the regular every four hour dose or 10% of the total daily dose.
- If a patient requires three or more breakthrough doses in a 24 hour period, then the regularly scheduled pain medication should be increased.(4)
- When the regularly scheduled pain medication dose is increased, remember the breakthrough dose should be increased proportionately. (6)
- Document your pain assessment prior to and after the breakthrough medication has been administered.

Incident Pain

Incident pain is a distinct type of breakthrough pain. It is pain that directly results from an action or activity (1). Incident pain can be experienced by patients with bone metastases, rib fractures and myofascial involvement of a tumor (6). Circumstances in which incident pain can occur include:

- Turning patients
- Bathing /Changing clothes
- Transfers
- Wound Management / Dressing changes
- Catheterization / Disimpaction
- Ambulation

Management of incident pain requires the use of a short-acting opioid administered sublingually 10-15 minutes **prior** to the activity (7). The injectable forms of fentanyl and sufentanil are the medications commonly utilized for incident pain. They are administered via the transmucosal route (sublingual, buccal or intranasal), as they are rapidly absorbed through the mucous membranes. The onset of action is about 5-6 minutes and the duration of analgesia lasts 20-30 minutes.(6, 7) Use caution with fentanyl and sufentanil preparations as they are extremely potent opioids. Fentanyl is approximately 100 times more potent than morphine and sufentanil is 1000 times more potent than morphine. (7)

In patients with acute and chronic pain it is important to consider the use of breakthrough pain medications. If used appropriately, breakthrough medications can be helpful in managing breakthrough pain and also be useful in evaluating the effectiveness of overall pain management.

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