

Journal Watch

Breakthrough pain: characteristics and impact in patients with cancer pain

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Received during: Journal Club, TPCU

Abstract:

Few surveys have been performed to define the characteristics and impact of breakthrough pain in the cancer population. In this cross-sectional survey of inpatients with cancer, patients responded to a structured interview (the Breakthrough Pain Questionnaire) designed to characterize breakthrough pain, and also completed measures of pain and mood (Memorial Pain Assessment Card (MPAC)), pain-related interference in function (Brief Pain Inventory (BPI)), depressed mood (Beck Depression Inventory (BDI)), and anxiety (Beck Anxiety Inventory (BAI)). Of 178 eligible patients, 164 (92.2%) met the criteria for controlled background pain. The median age was 50.6 years (range 26 to 77 year), 52% were men, and 80.6% were Caucasian. Tumor diagnoses were mixed, 75% had metastatic disease, 65% had pain caused directly by the neoplasm, and a majority had mixed nociceptive-neuropathic pain. The median Karnofsky Performance Status score was 60 (range 40 to 90). Eighty-four (51.2%) patients had experienced breakthrough pain during the previous day. The median number of episodes was six (range 1 to 60) and the median interval from onset to peak was 3 min (range 1 s to 30 min). Although almost two-thirds (61.7%) could identify precipitants (movement 20.4%;; end-of-dose failure 13.2%), pain was unpredictable in a large majority (78.2%). Patients with breakthrough pain had more intense ($P < 0.001$) and more frequent ($P < 0.001$) background pain than patients without breakthrough pain. Breakthrough pain was also associated with greater pain-related functional impairment (difference in mean BPI, $P < 0.001$), worse mood (mood VAS, $P < 0.05$; BDI, $P < 0.001$), and more anxiety (BAI, $P < 0.001$). Multivariate analysis confirmed that breakthrough pain independently contributed to impaired functioning and psychological distress. These data confirm that cancer-related breakthrough pain is a prevalent and heterogeneous phenomenon. The presence of breakthrough pain is a marker of a generally more severe pain syndrome, and is associated with both pain-related functional impairment and psychological distress. The findings suggest the need for further studies of breakthrough pain and more effective therapeutic strategies

Comments:

Strengths/uniqueness: Breakthrough pain is an under-researched topic and this article attempts to explore the characteristics of breakthrough pain and its impact on functioning and mood. It is a cross-sectional survey with a good sample size.

Weaknesses: The assessment algorithm used in the study has not been validated. This study forms a basis only for further studies. It is not clear whether breakthrough pain is a cause or an effect of declining function and adverse mood.

Relevance to Palliative Care: This article is a good motivator for further studies of breakthrough pain and its management. It prompts us to assess the effect of management options more critically.