



American Pain Foundation
A United Voice of Hope and Power over Pain

When Cancer Pain Breaks Through

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Breakthrough Pain

- What is breakthrough pain?
- Why is it important?
- How common is it?
- What are the characteristics?
- How should doctors evaluate it?
- How should it be treated?



Breakthrough Pain

- It is important to distinguish a type of pain if it
 - Has a unique cause
 - Has importance in the lives of patients
 - Has specific treatments
- Breakthrough pain should be distinguished because it
 - Is important in the lives of patients
 - Has specific treatments



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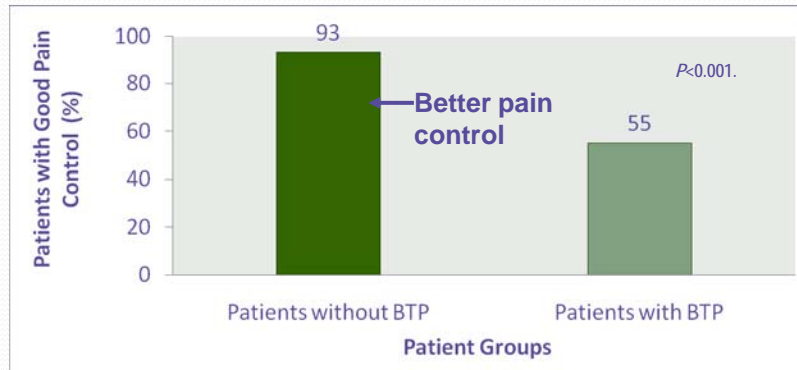
Cancer-Related Breakthrough Pain: Importance in the Lives of Patients

- Compared with patients without breakthrough pain, patients with breakthrough pain have:
 - More severe pain
 - Reduced response to opioid therapy
 - More problems functioning
 - More psychological distress
 - Higher cost of care



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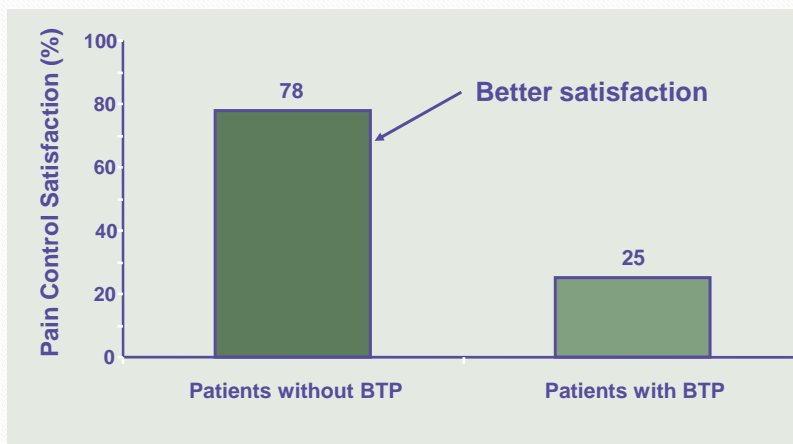
Breakthrough Pain: Overall Pain Control



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Grivas E, et al. *J Pain Symptom Manage*. 1995; 10:336-359.

Breakthrough Pain: Satisfaction with Pain Control



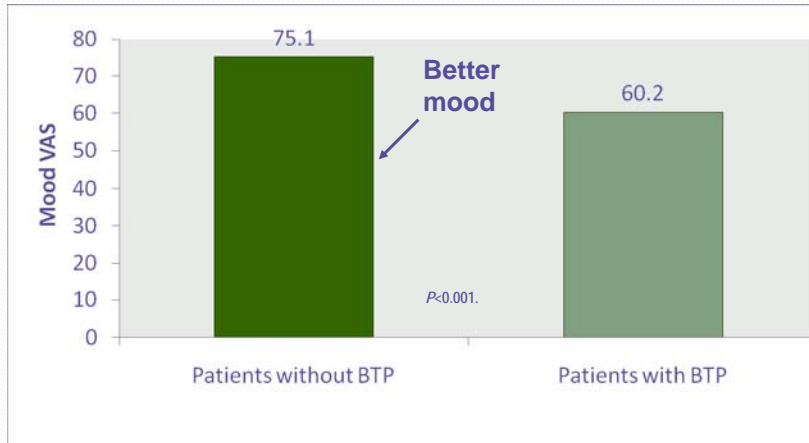
$P < 0.0005$.



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Cappeletta G, et al. *J Pain Symptom Manage*. 2000; 20:57-74.

Breakthrough Pain: Impact on Mood



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Porchay RK, et al. Pain. 1999; 81:129-134

Breakthrough Pain: Impact on Function

Without BTP: better activity, mood, walking, ability to work, social relations, sleep, and life enjoyment



- Patients without BTP
- Patients with BTP

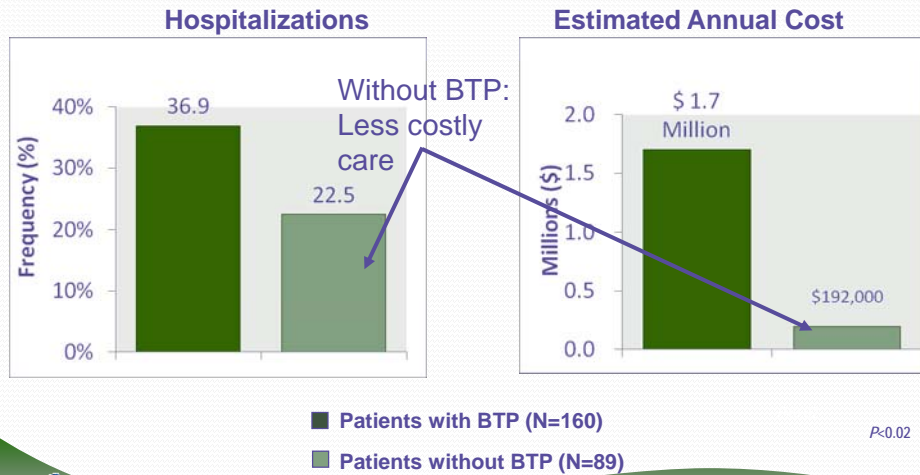
$P < 0.001$.



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Porchay RK, et al. Pain. 1999; 81:129-134

Breakthrough Pain: Cost of Care



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Furuta B, et al. J Pain 2002;3:30-36

Breakthrough Pain: What Is It?

- Breakthrough pain
 - A type of pain defined by its timing and its severity
- Sometimes called by other names:
 - Episodic pain
 - Incident pain
 - End-of-dose failure



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Breakthrough Pain: What Is It?

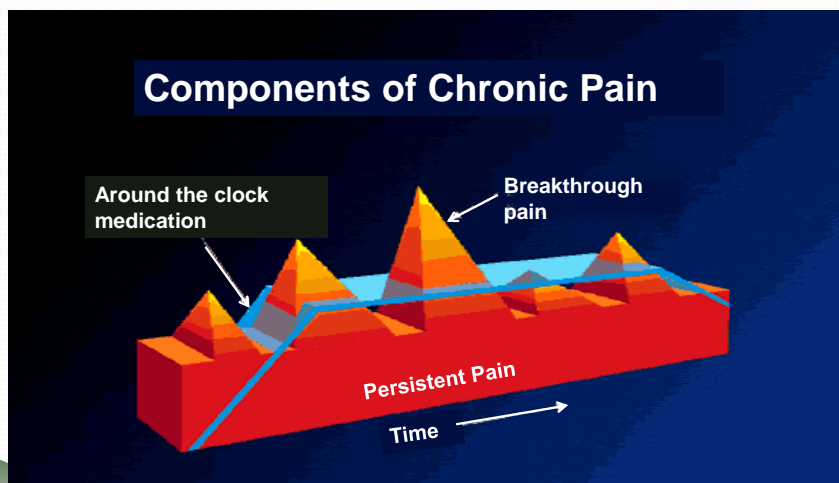
- Most common definition:
 - A transitory, severe or excruciating pain, which lasts seconds to hours and is superimposed on a background pain that is controlled using an opioid medication



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Breakthrough Pain: What Is It?

Components of Chronic Pain



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Cancer-Related Breakthrough Pain: How Common Is It?

- Outpatient practices: 33%
- Inpatient settings: 50-90%
- Home care/inpatient hospice: 89%



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Breakthrough Pain: What are the Characteristics?

- Every person is different
- Usually similar to the background pain in terms of location and cause
- Frequency: Usually about 2 to 3 attacks per day



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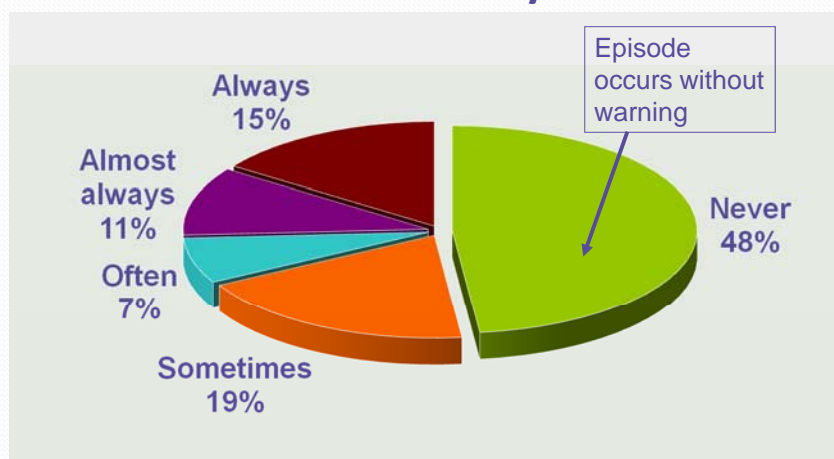
Breakthrough Pain: What are the Characteristics?

- Most episodes come on very quickly, peaking within a few minutes
- Most episodes last a short time but some last hours
- 50% associated with voluntary actions, like walking
- Almost half the episodes occur without warning



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Cancer-Related Breakthrough Pain: Predictability



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Portney RR, et al. Pain 1999;85:125-134

Breakthrough Pain: How Should Doctors Evaluate It?

- Issues
 - Some doctors do not appreciate how important breakthrough pain can be:
 - They may not know the recent research
 - They may think that the patient is managing it well because a short-acting drug has been given
 - Patients may not complain about pain in general
 - Patients may not mention that the breakthrough episodes are a problem



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Breakthrough Pain: How Should Doctors Evaluate It?

- Issues
 - Patient should know
 - Both pain in general and breakthrough pain specifically should be viewed as significant problems that should be evaluated by physicians
 - If the doctor does not ask about pain, the patient should bring it up
 - If a treatment is not working well enough, tell the physician and ask that it be changed



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Breakthrough Pain: How Should Doctors Evaluate It?

- To evaluate the pain in general, the doctor should ask questions about
 - Pain location, severity, quality, timing and factors that make it better or make it worse
 - Prior treatments and evaluation
 - Current treatments, include effectiveness, side effects, and benefits on mood, sleep, energy and functioning



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Breakthrough Pain: How Should Doctors Evaluate It?

- To further evaluate the pain,
 - An examination is done
 - X-rays, CT scan or MRI may be needed
- All this information should inform the doctor about the:
 - Characteristics of the background pain and the breakthrough pain
 - The specific causes of these pains
 - Other problems and conditions that are important in developing a plan of care



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Breakthrough Pain: How Should Doctors Evaluate It?

- Issues
 - Sometimes treating breakthrough is an **urgent** problem
 - A high level of pain—background pain or breakthrough pain—is never acceptable



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Breakthrough Pain: How Should It Be Treated?

- Guidelines based on expert opinion
- Elements:
 - Treat the underlying cause if possible
 - Adjust the opioid pain medication for the background pain
 - Use specific treatments for breakthrough pain



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Breakthrough Pain: How Should It Be Treated?

- Treat the underlying cause if possible
 - Cause of the pain
 - Example: Radiation to cancer in a bone
 - Cause of the specific episodes
 - Examples:
 - Cough medicine for pain precipitated by cough
 - A brace for a limb that hurts with movement



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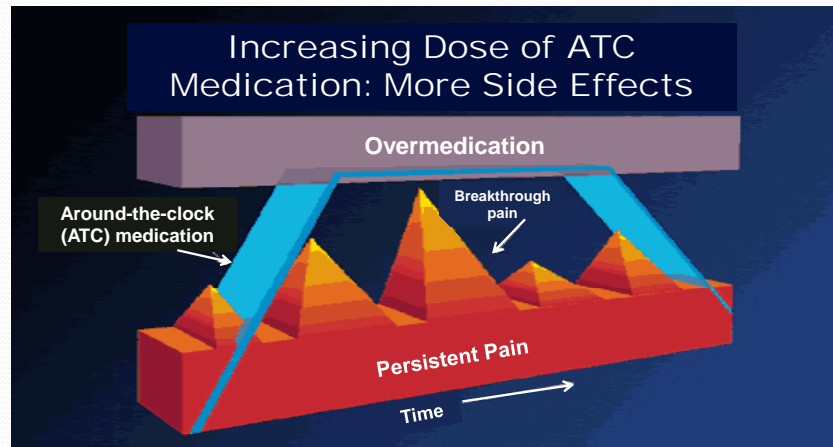
Breakthrough Pain: How Should It Be Treated?

- Adjust the opioid pain medication for the background pain
 - Most clearly useful for “end-of-dose failure”
 - Theoretically helpful in other breakthrough pains
 - Risk of overmedication
 - Controversial



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Breakthrough Pain: How Should It Be Treated?



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Breakthrough Pain: How Should It Be Treated?

- Specific treatments for breakthrough pain
 - Non-drug therapies
 - Drug therapies



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Breakthrough Pain: How Should It Be Treated?

- Non-drug therapies for breakthrough pain
 - Application of heat or cold
 - Massage or stretching
 - Cognitive techniques like deep relaxation, mental imagery or self-hypnosis



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Breakthrough Pain: How Should It Be Treated?

- Drug therapy for breakthrough pain
 - Non-opioid
 - Acetaminophen
 - NSAID like ibuprofen or naproxen
 - Opioid



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Breakthrough Pain: How Should It Be Treated?

- Opioid treatment for breakthrough pain
 - Known as “rescue dose”
 - Should be considered the standard of care for cancer patients
 - Treatment guidelines based on expert opinion



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“Rescue Dose” According to Expert Opinion

- Expert opinion:
 - Most common approach at the present time
 - Oral, short-acting opioid drug, usually the same drug as the one used for the background pain
 - Examples: oral morphine, oral oxycodone, oral hydromorphone



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“Rescue Dose” According to Expert Opinion

- Expert opinion:
 - Most common approach at the present time
 - Dose is a percentage of the dose given for the background pain
 - Dose can be taken every 1 or 2 hours as needed
 - Dose should be adjusted over time to give the best relief possible without intolerable side effects



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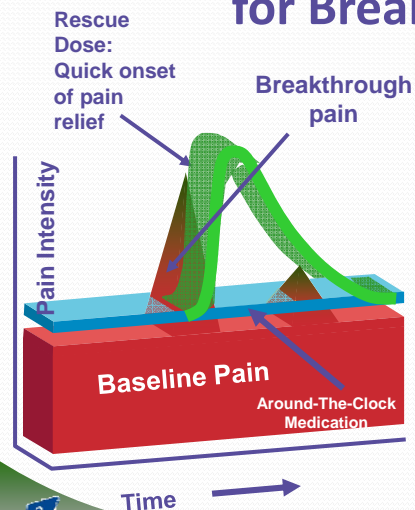
“Rescue Dose” According to Expert Opinion

- Expert opinion:
 - New “rapid onset” drugs have appeared on the market and offer an alternative that may be considered on a case-by-case basis



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Rapid Onset Opioids for Breakthrough Pain



New rapid onset formulations use a drug, fentanyl, that can be absorbed through the mucous membranes

The drug enters the bloodstream faster and can give quicker relief

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Rapid Onset Opioids for Breakthrough Pain

- Approved formulations in the US and Europe
 - Oral transmucosal fentanyl citrate
 - Fentanyl effervescent buccal tablet
 - Bio-erodible mucoadhesive (BEMA™) patch
 - Fentanyl solution nasal spray
 - Sublingual fentanyl tablet
- Others are in development

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Rapid Onset Opioids for Breakthrough Pain

- Not enough information to know who would benefit from these drugs
- It is reasonable to offer them, if possible, to:
 - Patients who do not benefit from an oral drug because it works too slowly, and
 - Patients whose breakthrough pain appears quickly and severely
- Cost and insurance coverage may be an issue



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Breakthrough Pain: How Should It Be Treated?

- Other issues concerning opioid treatment
 - All opioids can cause side effects such as sleepiness, mental clouding and constipation
 - The physician should be told about side effects
 - If possible, the patient should describe the side effects of the background opioid and the opioid for breakthrough pain separately



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Breakthrough Pain: How Should It Be Treated?

- Other issues concerning opioid treatment
 - Each person responds different to each opioid drug
 - If side effects occur, the opioid can be switched—called “opioid rotation”
 - If side effects are largely due to the rescue dose, just the rescue dose can be changed



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Breakthrough Pain: How Should It Be Treated?

- Other issues concerning opioid treatment
 - All opioids are ‘abusable’
 - The physician must monitor them carefully and follow the regulations about prescribing
 - The physician may request urine drug tests or other measures to improve monitoring
 - The patient must be vigilant in terms of storing the medication in a way that reduces the risk of theft
 - The patient must follow instructions and communicate any problem that occurs



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Breakthrough Pain

- Conclusions
 - Breakthrough pain can be a significant problem
 - Patients with cancer pain should make sure that their physicians evaluate both the background pain and breakthrough pain
 - If breakthrough pain is distressing, it should be treated
 - There are many approaches to treatment and patients should discuss the options with their physicians
 - Ongoing communication is important, and if a treatment does not work, another should be tried
 - More research is needed in this area



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Resources

- APF Website – www.painfoundation.org
 - APF's Breakthrough Cancer Pain Online Guide - <http://www.painfoundation.org/learn/programs/spotlight-on-cancer-pain/breakthrough-pain/>
- American Cancer Society – www.cancer.org
- CANCERCare – www.cancercare.org
- Cancer.Net – www.cancer.net
- Cancer Support Community – www.cancersupportcommunity.org
- Lance Armstrong Foundation – www.livestrong.org
- National Coalition for Cancer Survivorship – www.canceradvocacy.org



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Questions & Answers



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Thank you for joining us!