

BREAKTHROUGH CANCER PAIN

Pain is one of the most common, yet underreported, misunderstood and feared symptoms of having cancer. Most people with cancer will experience pain at some point during their course of treatment. For some, pain and other complications will continue to persist long after their treatment has ended. But there are treatments available to provide relief.

Managing cancer-related pain, as with other common symptoms, such as fatigue, nausea and depression, is an important part of comprehensive, quality cancer care. It should also be reassessed and treated on an ongoing basis post-treatment, once patients have transitioned back to their primary care provider.

Whether someone is undergoing active cancer treatment, are in remission or beyond, there is no reason for them to suffer with unrelieved pain.

Understanding Breakthrough Cancer Pain (BTCP)

Breakthrough cancer pain (BTCP) is different from ongoing, persistent pain. Unlike persistent pain (sometimes called background pain) that develops gradually and lasts at least 12 hours a day, BTCP strikes suddenly. It is usually unpredictable, lasts for an average of 30 minutes and is often described as sharp, shooting and radiating.

Background Pain vs. Breakthrough Pain

	Background Pain	Breakthrough Pain
Onset	Sudden or gradual development	Sudden, usually unpredictable
Duration	Persistent, lasts at least 12 hours a day	Can last from a few seconds to a few hours, with an average duration of 30 minutes
Description	Dull, aching, sharp	Sharp, shooting, radiating
Treatment	Long acting opioids, taken on a fixed schedule	Short acting, immediate release or rapid onset opioids, taken as needed

BTCP can be very challenging for those living with cancer pain and their healthcare providers. It can be difficult to control and often is associated with inadequately controlled background pain. If not adequately treated, breakthrough pain can contribute to the negative impact produced by the cancer pain overall.

Uncontrolled pain can:

- interfere with sleep and reduce the ability to take part in enjoyable activities
- limit the ability to work or perform everyday tasks
- strain relationships
- lower self-esteem and sense of purpose
- cause anxiety, depression and feelings of isolation
- lead to the decision to reject medical recommendations and possibly result in poorer treatment outcomes
- make it more difficult to cope with other aspects of cancer care
- lead to additional financial hardship

Unmanaged pain also places additional burdens on the health care system in the form of increased medical visits and hospitalizations.

Research suggests that one-half to two thirds of people with chronic cancer-related pain report regular and recurrent episodes across multiple settings, including hospitals, hospice, long-term care facilities and at home. The likelihood of pain increases, as does its severity, with advancing cancer stage.

Despite the high number of people who suffer with BTCP, there is no uniform terminology or standard assessment tool available to describe and evaluate BTCP, which makes it especially challenging.

What is BTCP?

While there is no universally accepted definition of BTCP—even among many of the world’s leading experts—most agree that these sudden, short-lived episodes of moderate-to-severe pain emerge spontaneously or in response to a specific activity or movement, despite otherwise stable or adequately controlled baseline or background pain.

BTCP is often reported to be:

- Frequent
- Comes on rapidly
- Short in duration
- Moderate-to-severe in intensity

Episodes of BTCP can:

- Be triggered by a specific activity or movement; for example, walking, dressing, changing positions—even something as simple as coughing or sneezing
- Occur unexpectedly without warning

Further Differentiating BTCP

It is important to emphasize that BTCP is a pain syndrome in its own right and not the result of undertreated background pain. While inadequate doses of around-the-clock medication may be responsible for some cancer pain flares, BTCP can occur even when a patient is taking the right dose of medication on a regular schedule to control background pain. Because the nature of BTCP differs from that of background pain, it requires a unique treatment approach.

In addition to differentiating BTCP from uncontrolled persistent pain in which adjustments to medications should first be addressed, experts also stress that these short-lived flares of pain are not the same as:

- acute episodic pain where there is no persistent pain in between flare ups or

- end-of-dose failure when a long-acting medication wears off sooner than one would expect based on duration of action.

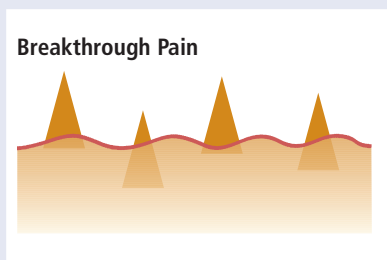
RESEARCH HAS SHOWN PEOPLE WITH BTCP:

- Report an average of four episodes per day
- Have background pain that tends to be more intense and frequent
- Experience significantly greater levels of depression and anxiety
- Are faced with medical costs five times of patients without BTCP, likely due to the need for more frequent medical appointments
- Minorities, women and elders may be at greater risk for undertreatment of cancer pain

What causes BTCP?

As explained, BTCP can coexist alongside well managed background pain. While the cause of BTCP varies from person-to-person, it generally falls into one of the following categories:

- *Pain related to a specific activity or movement.* This may be due to a voluntary movement like walking or changing positions, or to an involuntary movement like coughing or sneezing.
- *Pain related to the cancer treatment (for example, post surgery) or the cancer itself.* Individuals with certain types of cancer, like those affecting the bones or nerves, are more likely to have BTCP.
- *Spontaneous pain with no clear cause.* These episodes are unpredictable and usually last only a few minutes.



HOW DOES BTCP AFFECT PEOPLE WITH CANCER?

A recent survey commissioned by APF finds BTCP is one of the most challenging aspects of having cancer, according to three out of four (75 percent) U.S. adults who have ever been diagnosed with cancer and experience this type of pain. Nine out of 10 of those surveyed say BTCP negatively affects their quality of life, and the same number believe their lives would improve if they could get this pain under control. (For the complete survey results, visit the www.painfoundation.org.)

Because BTCP comes on so strongly and unexpectedly, those affected may consciously or subconsciously start to close themselves off from the world—scared that they will be doubled over in excruciating pain with their next move.

Unrelieved pain can diminish every aspect of a person’s life, including their physical, mental and social well being. In general, patients with BTCP:

- Report more severe pain overall and have greater physical debilitation and psychological distress than those without BTCP
- Often experience disrupted sleep and a loss of appetite
- Have difficulty carrying out daily activities
- Report added strain on personal relationships
- May be unable to work or have to cut back
- May need for more expensive medical treatments, often resulting in financial hardship

Challenges to Recognizing and Managing BTCP

Treating BTCP poses a challenge because it is often difficult to recognize and is sometimes confused with undertreated background pain.

Unfortunately, it is not possible to accurately evaluate BTCP until background pain is well controlled with fixed-schedule medications and there is currently no standardized tool for assessing BTCP. Because there is no consensus among medical experts about how to define BTCP, it is difficult to develop and recommend treatment strategies. Variations in the language that patients and healthcare providers use to talk to each other about BTCP may also create confusion.

In addition, studies find that people with cancer are hesitant to report pain for a variety of reasons. They may:

1 *View pain as an unavoidable part of having cancer.* As a result, they may downplay or fail to mention its impact on their lives. *FACT:* Almost all cancer pain, including breakthrough pain, can be managed.

2 *Believe that talking about pain makes them a complainer.*

Many people want to be on their “best behavior” in the doctor’s office so that they are seen as a “good patient,” not a complainer. *FACT:* Pain should be taken seriously. Trying to grin and bear the pain or ignoring it can be harmful to one’s health and wellbeing.

3 *Fear that pain is a sign that the cancer is spreading or has come back (recurrence).* *FACT:*

While pain can indicate that cancer has spread or that there is nerve damage from intensive cancer therapies, this is not always the case.

4 *Worry that calling attention to their pain may distract the clinician from treating the cancer itself.* Patients want their oncologists to be completely focused on treating their cancer and don’t want to do or say anything that might get them off track. *FACT:*

Treating pain is an integral part of symptom management and quality cancer care. Pain can often interfere with sleep

and appetite and, in turn, one’s ability to fight disease.

5 *Want to avoid taking an opioid (strong prescription pain medications) either due to fears of addiction or not wanting to add yet another medication to their list or take higher doses.* *FACT:* As with any medication, there are risks. Addiction is rare when cancer pain medicines are properly prescribed and taken as directed.

6 *Fear that needing strong pain medication means they’re gravely ill and close to death.* *FACT:* Taking opioids does not mean a short timeframe or poor prognosis. Many cancer survivors take opioids for their pain, which has helped them lead a more active lifestyle.

The key to effective pain relief lies in understanding why and how BTCP flares are different from other types of cancer-related pain.

People with cancer pain may be hesitant to “complain” about BTCP, thinking that flare ups are an inevitable part of cancer that they have to cope with, and healthcare providers may fail to address BTCP as a separate pain phenomenon.

Effectively Treating BTCP

In almost all cases, cancer-related pain can be managed through a combination of medications and other therapies. As with other types of pain, timely access to quality pain care is the best way to minimize suffering and disability. Treatment should be individualized to meet the person’s needs and aim to reduce pain, restore functioning and improve quality of life.

Medications

BTCP typically comes on suddenly without warning and lasts for a relatively short period of time, highlighting the need for medications that provide rapid pain relief. Medications for BTCP should be easily delivered, act quickly, and stay in the body for a short period of time to minimize side effects often associated with longer acting medications.

Short-acting medications may be prescribed to take on a fixed schedule of every 4-6 hours or for sudden episodes of severe pain. Healthcare providers may advise taking these medications as soon as the pain occurs or in anticipation of an activity or situation known to trigger BTCP.

Most immediate release pain medications such as morphine, oxycodone and hydromorphone peak in one hour; while the newer rapid onset fentanyl products peak in 30 minutes. Rapid onset pain medications are

delivered transmucosally (which means the medication is absorbed in the mouth through the cheek) and may be recommended for breakthrough pain given that the typical BTCP pain flare lasts only 30 minutes. These work quickly as the pain begins to rise and wear off quickly as the pain begins to disappear minimizing the lag time between pain onset and medication relief.

The optimal use of opioid treatment for BTCP depends largely on the characteristics of an individual’s pain. Matching the characteristics of the pain (onset, duration, type) with the characteristics of the medication (onset, duration, type) can help to optimize effective pain control.

Moreover, in developing a patient’s pain management plan, clinicians should identify and treat any underlying cause of the pain and assess whether modifications to the patient’s pain management plan for background pain are needed.

Beyond Medicine

The use of medications is only one piece of the treatment puzzle. Integrating a variety of non-drug and complementary therapies may help provide relief. These approaches might include:

- Physical therapy, light massage, or the use of support braces and other devices to immobilize parts of the body related to pain with movement
- Psychological interventions such as relaxation, hypnosis, meditation, cognitive therapy, and coping strategies
- Lifestyle changes including pacing oneself, and limiting activities that trigger pain
- Managing side effects that contribute to pain, such as constipation and coughing
- Application of ice or heat to affected areas as needed
- Acupuncture, which is under study

BTCP MEDICATION QUICK FACTS

- Prescription medications called opioids (e.g., morphine, oxycodone, fentanyl) are integral to the treatment of advanced cancer pain.
- Immediate release opioids in the form of pills and liquids are commonly used to treat BTCP, but can take up to 60 minutes to provide pain relief.
- Rapid onset opioids in the form of lozenges and lollipops are absorbed directly into the mouth and typically provide pain relief within 5 minutes.
- For patients who have trouble swallowing, medication can also be taken under the tongue, by injection or rectally.
- A combination of medications and other non-drug strategies is often the most effective approach to treating BTCP.
- It’s important not to overtreat background pain as a way to manage BTCP, as this can result in overmedication and unnecessary side effects.

Keys to Addressing BTCP

Finding relief for BTCP can be a long, complex process that requires persistence on the part of both the person living with pain and his or her medical team. Open and frequent communication between both parties is essential to getting quality pain care.

Individuals living with pain should carefully track the occurrence of BTCP through the use of a pain diary (see APF's *Targeting Chronic Pain Notebook* for customizable worksheets and daily pain logs) and share this information with their healthcare providers. They should be as specific as possible when describing their pain, including details about the onset, frequency and intensity of pain flares and making a note of pain triggers and any activities or treatments that alleviate pain.

Healthcare providers should ensure that every person with cancer pain understands the concept of BTCP and specifically ask about it as part of the overall pain assessment process.

Caregivers can play a role by helping those who may be too weak or tired to keep track of their pain and advocate for pain relief.

Everyone responds differently to medications and pain that goes untreated can become more severe and difficult to control over time. It's important that individuals and healthcare providers be willing to explore multiple treatment strategies until pain is adequately relieved.

Moving Forward

Breakthrough pain occurs all too often in people living with cancer, yet it is often widely misunderstood. While there is increasing interest in BTCP among researchers, it has not yet been studied extensively and continues to be difficult to identify and evaluate, highlighting the need for better assessment tools.

Given that people who experience BTCP often have a worse pain experience overall, researchers studying cancer pain need to take a closer look at BTCP as they address future directions in cancer pain management. Studies are also needed to determine the most effective treatments and best combination of strategies in effectively alleviating BTCP.

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