Why You Should NOT Lower Inflammation After Injury Pamela A. Popper, President Wellness Forum Health

Inflammation is a natural process that is triggered when body tissues are damaged due to physical trauma or injury. The inflammatory response facilitates the removal of debris and pathogens and is also essential for the repair process.

Symptoms of acute inflammation include:

- pain (due to swelling caused by fluid build-up which places pressure on nerve endings)
- redness (due to capillaries which are filled with more blood)
- immobility or loss of function in the inflamed area
- heat due to increased blood flow

The inflammatory process starts with the production of inflammatory chemicals like histamine, kinins, prostaglandins, and lymphokines. These promote dilation of small blood vessels at the site of injury, and increase the permeability of capillaries. This facilitates the delivery of immune cells to the site that destroy pathogens; stimulates local blood clotting which creates a physical barrier to the spread of infection throughout the blood stream, promotes tissue repair, and removes debris from the site of the injury.

So, if inflammation is a natural response to injury or trauma, and it is needed for healing, what happens if a person takes an anti-inflammatory drug such as an NSAID as soon as an injury occurs to reduce inflammation, swelling and pain?

A recent research study reveals the answer to this question and also offers some insight as to why some people who are injured have long-term chronic pain while others recover and have no residual pain.

The authors of the study reported that patients who had lower back pain along with higher inflammation levels were more likely to experience resolution of pain within three months than patients who had lower levels of inflammation. The researchers reported that blocking the inflammatory response with medication can prolong musculoskeletal pain.

This same result was found in mouse studies. Blocking inflammation with dexamethasone (a steroid drug) or diclofenac (an NSAID) relieved pain within the first week but resulted in more sustained pain over time. Mice given a saline control or pain medications that did not lower inflammation levels had pain resolution in a significantly shorter period of time than mice that were treated with anti-inflammatory drugs.

People all over the world reach for anti-inflammatory drugs when they are injured to relieve pain, and most people think all inflammation is bad. Doctors reinforce this idea by prescribing drugs for inflammation and pain in response to injury. But there is a difference between acute inflammation due to injury and chronic inflammation that is due to poor health. Acute inflammation plays a role in healing, while chronic inflammation contributes to disease onset and progression.

The next time you have an injury – due to a fall, a car accident, bumping into something – it's best to just let it heal. Pressing through and dealing with the discomfort now is the best chance of not having chronic pain in the future.

Alejandro Manjarrez PhD. "Early Inflammation Protects Against Chronic Pain, Study Finds." *The Scientist* May 12 2022.