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Workers' Comp

What's in Your Medicine Cabinet?

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How many of us have medicine cabinets where we store our “you never know” items? We routinely pick up cough drops and syrups, adult and child variations of over-the-counter (OTC) pain relievers, muscle creams, bandages, even some essential oils for good measure, because, you never know when you might need something.

Most of us believe that we are being proactive and preparing for a likely future event when we will need to reach into our medicine cabinet for relief for ourselves or a loved one. We have learned through experience that having common nonsteroidal anti-inflammatory drugs (NSAIDs), like ibuprofen or naproxen, is extremely helpful in our daily lives when aches and pains arise. Lucky for us, they have minimal side effects, especially compared to prescription medications used to treat pain such as muscle relaxants and opioids.

Most workers’ compensation treatment guidelines recommend the use of NSAIDs as a first-line defense or treatment for acute pain. For more severe pain, like musculoskeletal conditions or back pain, stronger prescription-strength NSAIDs are commonly prescribed. Some states, like Oregon, require a letter of medical necessity or clinical justification form for prescriptions of common, prescription-strength NSAIDs, like celecoxib.

However, a recent study found that commonly used anti-inflammatory medications found in our medicine cabinets (and our cars, purses and backpacks) prolonged pain in mice for up to 10-times longer than the expected initial pain. This is thought to be a result of blocking neutrophils, cells that assist in the immune and inflammatory responses.

The study, published in Science Translational Medicine this year, comes from a Canadian team of researchers and academics searching to learn more about how pain in the acute inflammatory response phase contributes to the development of chronic pain.

Inflammation is the body’s way of fighting against harmful agents, like injuries, toxins, or infections, to heal itself. As expected, one of the noticeable natural responses to inflammation is pain. For injuries and pain of all

levels, health care providers have touted the use of over-the-counter NSAIDs for decades as a safe and effective treatment. NSAIDs are successful in treating pain by blocking the body's enzymes that are responsible for inflammation.

The study analyzed immune cells in 98 human participants with lower back pain. Results show that neutrophils and the natural immune response may provide a protective effect against chronic pain. Researchers also tested the effects of NSAIDs in mice which led to short term pain relief, but chronic pain remained for a longer period. The researchers noted that this effect was not seen with other analgesics.

What does this all mean? It is too early to draw conclusions based off these findings and it is unlikely that pain guidelines will change as a result of this study. While researchers cite other studies to support these findings, additional research and better controlled studies are required to answer questions and confirm the best path for treating pain.

As consumers ourselves, knowing what we put in our bodies to treat pain and how it could potentially be counterproductive for long-term outcomes of our health is important. Further, considering whether or not that treatment should come from our medicine cabinet can help confirm the best path for treating pain.

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