

## The Mind-Body Connection in Back and Pelvic Pain

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IPPS 2017 Patient Advocate Reporter

Spine & Sports Medicine Fellow

Northwestern University/McGaw Medical Center & Shirley Ryan AbilityLab - Chicago, IL

Mentor: Stacey Berger, PT

Based on:

### Body & Brain in (Lumbo)Pelvic Pain

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### SUMMARY

Pain is an unwelcoming feeling. Pain can protect us when it helps our bodies get rid of threats, but it is not helpful when there is no continued injury or when it is chronic. Researchers have theories that there are three ways we can feel or perceive pain. These theories apply to acute or chronic pain, including pelvic pain. The first type, *nociceptive pain*, is when there is a clear injury or threat (example: a wound or broken bone). The second type, *neuropathic pain*, is when there is a problem in the nerves (example: diabetic nerve pain or sciatic pain in the back). The third type, *central sensitization*, is when pain signals (messages to and from the brain) get hyperactive. People can have one type of pain, two types, or a mix of all three.

When there is an injury, the brain (our central control system) can change signals (messages) and communication to the injured areas. This is a protective way to help with healing. Pain can



encourage our bodies to move differently in an attempt to reduce pain. Pain can also cause changes to muscle fiber. These changes are part of an inflammatory response that happens within days of injury. The higher the initial inflammatory response, the more likely the injury is to heal. These changes in our muscles and how we move can continue and lead to lasting pain. When this process



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lasts longer than 6 months, pain can become chronic or “learned.” Chronic pain is a vicious cycle where ongoing inflammation creates ongoing pain.

Treatment of chronic pain is not as simple as using a medication. The way we experience pain is complicated. It is a process that involves mind (brain) and body connections. Mind and body treatments address biological, psychological, and social factors. This is called the “*biopsychosocial model of pain*.” Biological factors are chemical messages in our body that transmit pain from the body to the brain. Psychological factors are feelings of depression, anxiety, sleep disruption, and difficulties coping with stress that can increase pain or affect how one manages pain. Social factors are the impact that pain has on daily activities and relationships with friends, family, co-workers, and others in the community. Studies show exercise is a helpful treatment for pain management. In fact, exercise is one of the best ways to treat chronic pain. Exercise works by healing muscles and promoting our body’s natural anti-inflammatory responses. Exercise has also been shown to help with mood and sleep.