



Non-toxic, Non-invasive Pain Management using INDIGO Biofeedback

The dictionary definition of pain is “an unpleasant sensation, ranging from mild, localized discomfort to agony.” Pain comes from the Latin word “poena” meaning a fine, or a penalty

Peter Hart Research Associates report that in 2003 over 57% of all U.S. adults experience chronic pain — which translates to about 117 million people.

Pain can be all encompassing. Even when medicated, it can decrease your physical, emotional, social and spiritual well being in a variety of ways, causing:

- Loss of ability to function
- Feelings of tiredness and lethargy
- Loss of appetite or nausea
- Insomnia
- Loss of enjoyment and anxiety
- Depression, or inability to concentrate on anything except pain
- Feelings of a loss of control
- Less sociability and friendship connections
- Loss of sexual enjoyment/ inability to be affectionate
- Changes in appearance
- Feelings of being a burden on family or other caregivers

Chronic pain itself actually creates stress patterns and deterioration in parts of the brain. On MRI's pain can actually be shown to reduce the outer layer of the brain, showing up as less gray matter. Research suggests that it can actually shrink and destroy the brain regions responsible for memory.

Pain creates a double blind for the sufferer- while pain medications and opioids can be addictive or toxic long term; without medication pain can be unbearable. It is inadvisable to endure prolonged or unmanaged pain as it can complicate and exacerbate health problems. It is well documented that healing can be delayed or even disrupted if one does not have good pain management; it can also create cardiovascular problems, respiratory issues, gastrointestinal complications, immune system challenges, quality of life issues, and cognitive impairment.

While the vast majority of people with chronic pain may safely use pain medication, what may not be evident is that as many as 8.6 million to 11.7 million people taking prescription drugs also suffer from coexisting medication abuse or addiction problems. Other serious considerations for pain medication users include:

Opioid medications cause changes in the brain over time which can range from addiction, depression, anger management issues, memory loss, personality changes, central nervous system disorders, and processing disturbances particularly with important neurotransmitters such as GABA, Dopamine, Serotonin, Norepinephrine and others. Long term use of pain medications can also lead to dysfunctions of the pre-frontal cortex which governs executive functions such as reasoning, judgement and decision making.

The Good News:

There are other non-toxic and non-invasive ways to learn to manage pain effectively. Biofeedback has been proven effective in countless medical journals as a remedy for many kinds of pain from headaches, migraines, injured tissue, back pain and more.

Recent clinical trials on the efficacy of managing pain using the INDIGO EPR BIOFEEDBACK device show that participants in the active treatment group experienced a 62% reduction in pain interference with life activities over just three sessions; while the placebo group experienced no change at all over baseline at week three. Another pain measure showed that active group participants experienced a 42% improvement in pain severity over just three weeks, while placebo participants experienced a 14% increase in pain severity without INDIGO biofeedback as an intervention. The same study measured how participants mood was effected by pain- active participants registered a 14% improvement in mood, while placebo group's mood diminished by only 2.6%. (www.QBAA.org)