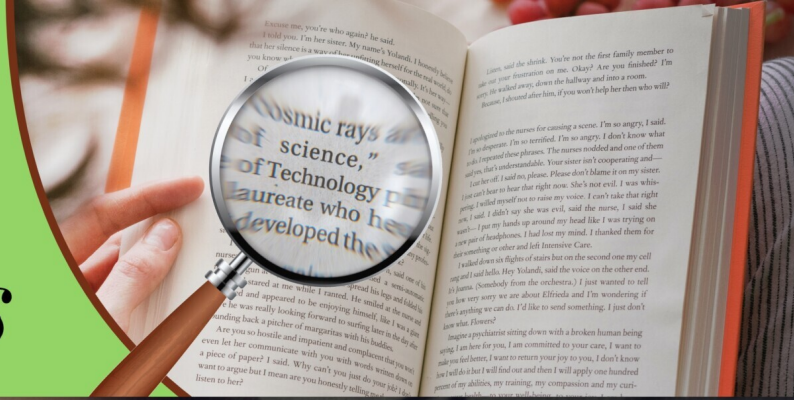


# *BaronE Health Reviews*



## *Retraining the brain to treat chronic pain?*

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*Holistic Natural Health Experts*

# About us

## Why Barone Health Reviews ?

Because today, although there is an incredible amount of information on the internet about health, finding authentic, professional, unbiased knowledge that is accessible to everyone's understanding is difficult.

In this era of technology and globalization, where there is an overwhelming amount of information, this may seem shocking but it is the sad truth. A responsible, self-reliant person can spend months searching for answers and solutions for their health and never find them.

On the internet, it is possible to find all types of information on health: courses, products, methods, practices, advice, opinions, explanations, scientific studies, devices, techniques, medicines, life experiences, anatomy, biology, medical research, etc...

Drowning in this ocean of health content, how can an average person tell the difference between lies and truths, misinformation and information, propaganda and knowledge, technical data and knowledge applicable to daily life?

## How is this different from ebooks, webinars, articles, etc.?

Like all content created by Holistic Natural Health Experts, the health review contains our independent expert opinions, tips and recommendations for anyone looking to improve their health.

However, the review offers you a different perspective. Unlike our articles, ebooks and webinars, where we develop our knowledge of a specific health topic with you, in the health analysis, we start from an external source that we dissect and analyze.

## What will I learn?

By dissecting and analyzing these external sources, we show you how we avoid the countless traps present in the majority of content available on the internet (especially free content). A bit like a magician revealing his tricks!

By bringing to light what is hidden behind a so-called "revolutionary" method, a "miracle product" or a so-called "holistic" medicine, you realize what is really possible and what is charlatanism or simply pure fraud.

This way, you make better decisions for your health, based on knowledge and true understanding.

## Who are the Barones ?

We are a family of three holistic health experts. Barone Santé is the name of our natural medicine practice in Switzerland, opened since 1993. Barone is simply our last name: Marina, Pascal and Philippe-Abraham Barone.

We have over 30 years of training and experience and have helped over 5,000 clients improve their health through natural medicines.

In 2021, our health education and online consultation platform is born: Holistic Natural Health Experts.

Since then, we never stop working for the health of our patients and developing this platform for all people who want to learn about health and gain independence.

# Retraining the brain to treat chronic pain?

## **Original article**

<https://www.nih.gov/news-events/nih-research-matters/retraining-brain-treat-chronic-pain>

*Retraining the brain to treat chronic pain*

*After a treatment called pain reprocessing therapy, two-thirds of people with mild or moderate chronic back pain reported being mostly or completely pain-free.*

This article develops a well-known concept in medicine, that of telling the patient who is in pain: it's all in your head.

We'll see just how little is understood about the physiology and anatomy of the human body.

The presentation of improvements reported by pain sufferers thanks to Pain Reprogramming Therapy (PRT) is confusing here.

If we take the time to look at the details of the study and the CONSORT flow chart of participants referenced in the article, we discover the true figures for the three groups, which are actually :

- 44 people in the PRT group
- For the placebo group, 44 people
- For the group that continued with usual care, 50 people

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8482298/figure/yoi210060f1/>

This gives a total of 138 people, not all of whom were monitored for one year.

Improvement in pain was assessed by personal evaluation on a scale of 1 to 10, and by cerebral magnetic resonance scans.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8482298/figure/yoi210060f2/>

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8482298/figure/yoi210060f3/>

The 66% improvement actually concerned 29 people in the PRT group, which is not very significant in terms of sample size.

Nonetheless, the issues raised by this study are very interesting to analyze, and we will develop them further.

# Retraining the brain to treat chronic pain?

*The findings suggest that people can learn to reduce the brain activity causing some types of chronic pain that occur in the absence of injury or persist after an injury has healed.*

Brain activity can always be modulated in all the areas that affect it. Eating, thinking, exercising, sleeping, receiving good or bad news, petting your dog, walking in nature, losing or gaining money, your job or your home: our environment or our physical, emotional or mental activity all modulate our brain activity.

Here, we're talking about chronic pain in the absence of injury, or after recovery from injury. However, there can be no real physical pain without a real cause. And just because conventional medicine can't find a cause doesn't mean there isn't one.

*More than 25 million people in the U.S. live with chronic pain, defined as pain that lasts for more than three months. Despite costing the health care system more than \$600 billion a year, existing treatments for chronic pain fail to provide relief for many people.*

Chronic pain is a major public health problem. What therapeutic response can conventional medicine provide? Not much, apart from the prescription of analgesics, physiotherapy and, in desperation, surgery.

Painkillers don't treat the causes of pain, and surgical intervention to relieve chronic pain with no diagnosed cause is almost always a failure, and leads to other problems.

What's more, while analgesics are useful and necessary over a short period in the case of acute pain, following trauma for example, they become poison for the body when consumed over the medium and long term in the case of chronic pain, leading to an impressive number of side effects.

We're not even talking about the various lethal drugs prescribed as analgesics, such as the infamous cases of oxycodone and fentanyl, veritable health scandals that have killed and continue to kill hundreds of thousands of people worldwide.

*The most common type of chronic pain is chronic back pain. In about 85% of cases, no physical cause for the pain—such as arthritis or disk damage—can be found. Such unexplained pain is thought to be caused by brain changes after an injury that persist even after the damage heals.*

Now we come to the heart of this article, where anatomical and physiological understanding is sorely lacking. Back pain is an excellent example.

Conventional medicine's approach is to define as physical causes only what it can objectify with its own examinations.

# Retraining the brain to treat chronic pain?

So, when X-rays, CT scans, magnetic resonance imaging or ultrasound scans detect nothing conclusive, the patient is simply told that there are no physical causes for his or her pain.

However, this is not the case!

To take the example of back pain, in the vast majority of cases it is caused by muscular tension in the back muscles.

But muscular tension cannot be detected by conventional medical tests.

Muscle tension can be incredibly painful, and until it is released, the pain will persist.

As a general rule, muscular tension affects several muscles and, contrary to popular belief, is not caused by poor posture or lack of exercise, but by a lack of stretching carried out correctly and regularly.

Digestive problems, which mainly affect the colon, are another major cause of back pain.

These digestive problems will generate pain in the ascending, transverse, descending and sigmoidal sections of the colon, which can be felt in the lower back and described as lumbar pain.

For example, persistent constipation that causes you pain will not be considered or even identified as the cause of your back pain by conventional medicine.

So, by understanding the anatomy and physiology of the human body, natural medicines can identify the very real physical causes of almost all so-called "unexplained" pain. Then, by simply treating these causes, chronic pain disappears.

Finally, it's worth remembering that although physical causes are almost always at the root of pain, if this isn't the case, it doesn't mean the pain is unexplained!

There are also other causes, such as energetic and emotional ones, which have been well known to natural medicines for centuries, but are still denied and ignored by conventional medicine. A blockage in the circulation of energy along the meridians, the channels through which vital energy flows, can lead to muscular, tendon, nerve or organ pain.

Ultimately, we can't decently speak of "unexplained pain". Of course, this does not mean that all pain can be cured, as some pain, although explained, is due to incurable causes.

*These changes in the brain are thought to serve an important purpose immediately after tissue damage. They provide a warning signal to restrict movement and let the body recover. However, if they continue to send that signal after the injury has healed, the result can be chronic pain.*

This is a very interesting remark, and leads us to explain what conventional medicine calls healing. Let's take the example of a person who has broken his foot. A cast is applied, the bone heals and the person is considered cured by conventional medicine.

# Retraining the brain to treat chronic pain?

This does not take into account possible damage to other tissues (muscles, tendons, ligaments, nerves), or the fear and emotional shock that may have occurred at the time of the fracture, depending on whether it was a fall, a road accident or an assault.

Have you ever seen a fall filmed in slow motion? You can see the sudden, violent movements the body makes in an attempt to catch itself, movements which inevitably generate muscular tension.

The resulting chronic pain is therefore pain linked to real causes, and not a warning signal that persists after the injury has healed.

*Researchers have developed a type of treatment called pain reprocessing therapy (PRT) to help the brain "unlearn" this kind of pain. PRT teaches people to perceive pain signals sent to the brain as less threatening. Therapists help participants do painful movements while helping them re-evaluate the sensations they experience. The treatment also includes training in managing emotions that may make pain feel worse.*

PRT should not be confused with natural treatments which aim to cure pain by treating its causes.

It can be useful as a complementary therapy to holistic pain management, when a person fears that their pain is the sign of a serious illness, despite all the tests to the contrary.

However, PRT does not treat pain or its causes, so it should only be used as a complement to holistic pain management, and only in certain individuals.

On the other hand, we need to distinguish between the fear that pain is a sign of serious illness and the fear of pain itself.

Let's take the example of a very painful lumbago. The sufferer is naturally afraid to move his or her back, for fear of triggering severe pain.

However, in this case, complete immobility is a terrible mistake which will aggravate the lumbago and slow down its healing.

Another example is the athlete who injures himself while performing a precise movement in his sport. Naturally, once the injury has healed, the athlete may be afraid to perform the precise movement for fear of re-injuring himself.

In such cases, it's a matter of apprehension about the injury or pain that needs to be overcome in order to complete the healing process.

So it's a mistake to help a person perform painful movements without understanding why they are painful. If pain exists, it can be explained.

# Retraining the brain to treat chronic pain?

*For the first clinical test of PRT, a team at the University of Colorado, Boulder led by Dr. Yoni Ashar (now at Weill Cornell Medical College) and Dr. Tor Wager (now at Dartmouth College) enrolled 151 people with mild to moderate chronic back pain for which no physical cause could be found. Participants received one of three treatments: four weeks of intensive PRT, a placebo injection of saline into the back, or a continuation of care as usual.*

The number of people recruited in this study is actually 138. This is far too low to guarantee that in all three groups, there are as many people with an undiagnosed physical cause of pain as there are people whose pain really has no physical cause.

In addition, and as stated in the study, "The study sample was relatively well-educated and active, and reported long-standing mild to moderate pain and disability at baseline."

Details of the study are available here:

[https://cdn.jamanetwork.com/ama/content\\_public/journal/psych/938834/yoi210060supp1\\_prod\\_1640022091.6519.pdf?Expires=1711492061&Signature=DObndx7NjvWjy0GCKA-V2Jb1UZmVfeP0efgLeJudQgQtYWTftN2QYYffw5muBd6NH9DXD65MooVJEpSI-gOmhw4iAA8X3FYsLRQB3k9Z3cbMROVdmZmRNx7SOFszsl4HmrM8~iJXhzBR4iGaWtHCLp7JN6i4U0HqC4HZCZCuB2cZytfvpkMHRk-Q-zp~offnYd~sWDG5XoaKnmFIUWXGnyrYDT~iflVsfG8Vp4WEJ3RM~Z-KAwVshQ3MazTX4Y~4CnmWOueg7VGxYnfrG1VY1csREOabcDiQ-wkJtLba2K2CIVeclPodVICZyeNhfXV4LRqwZmsCR-NJPTatyGNHnA\\_\\_&Key-Pair-Id=APKAIE5G5CRDK6RD3PGA](https://cdn.jamanetwork.com/ama/content_public/journal/psych/938834/yoi210060supp1_prod_1640022091.6519.pdf?Expires=1711492061&Signature=DObndx7NjvWjy0GCKA-V2Jb1UZmVfeP0efgLeJudQgQtYWTftN2QYYffw5muBd6NH9DXD65MooVJEpSI-gOmhw4iAA8X3FYsLRQB3k9Z3cbMROVdmZmRNx7SOFszsl4HmrM8~iJXhzBR4iGaWtHCLp7JN6i4U0HqC4HZCZCuB2cZytfvpkMHRk-Q-zp~offnYd~sWDG5XoaKnmFIUWXGnyrYDT~iflVsfG8Vp4WEJ3RM~Z-KAwVshQ3MazTX4Y~4CnmWOueg7VGxYnfrG1VY1csREOabcDiQ-wkJtLba2K2CIVeclPodVICZyeNhfXV4LRqwZmsCR-NJPTatyGNHnA__&Key-Pair-Id=APKAIE5G5CRDK6RD3PGA)

*Participants rated their pain before and four weeks after starting treatment. They also underwent fMRI scans to look at brain activity before and after treatment. The team followed up with participants one year later.*

*The study was funded by NIH's National Institute on Drug Abuse (NIDA), National Institute of Mental Health (NIMH), and National Center for Advancing Translational Sciences (NCATS). Results were published on September 29, 2021, in JAMA Psychiatry.*

*After 4 weeks of PRT, 66% of people who underwent the therapy reported being pain-free or nearly pain-free. In contrast, only 20% of people who received placebo injections and 10% of those receiving usual care reported similar improvements. The reductions in pain after PRT were largely maintained a year after treatment.*

*The fMRI scans revealed that, compared with the other two groups, people who received PRT had substantial reductions in brain activity in several regions associated with pain processing.*

MRI scans show that our body logically does not activate brain neurons in pain-related areas when pain no longer exists. What a discovery!

We can guess that the usual treatments are of little use... but the 20% improvement with the injections is not due to a placebo effect, since the injection of physiological saline rehydrates the tissues, and can reduce inflammation of the nerves even if only 1 ml of saline water was used per injection.

# Retraining the brain to treat chronic pain?

On the other hand, it is incomprehensible that prior to the injection, as cited in the study procedure, a video is viewed by patients to suggest the efficacy of the placebo effect:

"patients will view a brief video (~3 min) summarizing scientific findings regarding the therapeutic power of placebo treatments. The video will describe established placebo findings and suggest that placebos can be effective even when patients know the treatment is a placebo."

The placebo group is therefore not a true placebo group.

As for the PRT group, why didn't the remaining 34% improve?

*"For a long time, we have thought that chronic pain is due primarily to problems in the body, and most treatments to date have targeted that," Ashar says. "This treatment is based on the premise that the brain can generate pain in the absence of injury or after an injury has healed, and that people can unlearn that pain. Our study shows it works."*

*"This isn't suggesting that your pain is not real or that it's 'all in your head,'" Wager notes. "What it means is that if the causes are in the brain, the solutions may be there, too."*

*The volunteers were relatively well-educated and physically active. Further studies are needed to assess the approach in more diverse populations and with other types of chronic pain.*

In response to this statement:

"This treatment is based on the principle that the brain can generate pain in the absence of injury or after an injury has healed, and that people can unlearn that pain. Our study shows that it works."

Why not give another, more accurate version?

This other version could be as follows:

This treatment is based on the principle that the brain generates an alarm signal, a pain linked to causes that are real but not understood and not dealt with by conventional medicine, and PRT can teach some people to ignore or at least relativize this pain.

What's more, a crucial point has not yet been developed here.

# *Retraining the brain to treat chronic pain?*

Teaching someone to ignore pain when it is real and possibly treatable is inappropriate and often dangerous.

In fact, pain is an alarm signal, whose primary function is to attract our attention and make us react.

Just as a fire alarm signals a fire, pain is an alarm that signals a problem at the point of pain.

Nobody would consider a fire alarm as "pretty, harmless music", so why should we do the same with pain? It just doesn't make sense.

In the case of pain caused by untreated muscular tension, for example, learning to ignore the pain won't treat the muscular tension which will continue to exist and which, in the long term, could lead to other more serious problems such as muscle and tendon tears.

The important thing is to understand that the brain doesn't invent anything, as there are always one or more causes of pain.

Of course, stopping all physical activity and concentrating 24 hours a day on feeling pain is neither positive nor beneficial, yet this is no reason to learn to ignore it either.

From our point of view, the best attitude is always to investigate and treat pain whenever possible.

This is what we do with natural medicines, using a panoply of methods, diagnostic and therapeutic tools, and integrating the diagnoses of conventional medicine when available.

What's more, we treat health problems using only natural means, which is compatible with all other therapeutic approaches, including psychotherapy.

# Join Our Experts

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- Understanding medical test results and reports
- Find natural products to replace pharmaceuticals and chemical treatments when possible
- Ideas for staying healthy and protected while traveling and on vacation
- Strategies for improving your health at work
- Deepened understanding of how your life choices impact your health
- Clarifying health goals that are meaningful and achievable
- Developing a vision of your optimal health and thriving for longevity
- Any other personal requests or concerns on any health related issue



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