

>> The ABCDEFGHI of Persisting Pain <<

Pain that persists beyond the normal length of time required for tissue healing is termed "persistent pain."

If your pain has become persistent, it might help to consider a few non-biological factors, some of which might be present in your particular situation.

Pain is manufactured in the non-conscious parts of the brain, and is broadcast "forward" inside the brain for your conscious awareness to consider (see the [neuromatrix model](#)). Yes, the pain is "all in your head", but this situation does NOT mean you are "crazy"! Everything we do, think, conceive, believe, rationalize, is built upon brain perception which has reinforced itself over time. It's important to realize that the brain is prone to making mistakes sometimes!

As human beings we all exist within a milieu of factors which are bio- (biological), psycho- (psychological), and socio- (sociological). Our brain learns to adapt and juggle all three, the entire time we are alive, from birth to death. Persisting pain can be a phenomenon stemming from any one or all three of these aspects of normal human life being out of balance, or from the brain having not learned to juggle them effectively due to circumstances. This does not mean, however, that there is no hope - brains are always busy - they are learning machines which strive to become more efficient over time.

Pain is merely another normal facet of how the brain functions. The brain constantly "learns" (makes pathways and connections) and then it reinforces its own learning/ pathways. This process is automatic, and has a name: Neuroplasticity. It's a wonderful capacity which brains, especially human brains, have; existing neurons try to increase their synaptic connections. Furthermore, *new* neurons form (neurogenesis) and help construct new experiences, memories, perceptions and ideas our whole life long.

Persisting pain is a rather unfortunate aspect of neuroplasticity. Norman Doidge, in his book [The Brain that Changes Itself](#), calls pain "the downside of neuroplasticity". Your brain has "learned" - all by itself - to make, then focus on "pain", instead of automatically downregulating it (for whatever reason).

Your job will be to turn that around - understanding how pain is produced, then deciding you will unravel its mysteries yourself, in your own way, in your own nervous system. This is your privilege as the "person" who is the owner/operator/passenger of your own nervous system. It's also your responsibility.

You have a great amount of leverage over your own perception (of pain) you are (not) enjoying. You can learn to intervene and change your pathways. Your leverage on the situation is in your *thinking*. By making choices over what you will attend to, you can weaken some pathways and strengthen others. This means, you will gain a certain degree of control over your own neuroplasticity, over time. "Thinking" boils down to being just more neural activity - the only neural activity over which you can have any real conscious control. You can either allow your brain to continue the neuroplasticity direction it developed on its own, or you can view neuroplasticity as a "steering wheel" which you can begin to take control of, so that you can "steer" your life back toward a personal comfort zone.

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This paper is a series of "nodes" of thought at which you can learn to directly intervene and replace one kind of thinking (which reinforces the situation) with another (which won't). So let's explore the alphabetical list. Be honest with yourself as you explore these points and reflect on your own situation.

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A. Attitudes and beliefs

Do you have a passive approach to rehabilitation?

- Are you expecting a 'quick fix'?
 - There is no 'quick fix' for a truly sensitized nervous system.

Do you think that hurt = harm?

- Many people *without ANY* pain have x-ray changes, old injuries on MRI, etc. Many *with* pain have no changes at all that can be visualized on x-ray or MRI.
 - Take-home point: Correlation does not equal causation. When it comes to pain, you cannot automatically assume it is due to "damage" in a body "structure" that someone missed.
- Most of the time, even if an injury DID occur at some point, it would have "healed" within a few weeks or months.
 - The physical body has evolved to knit itself back together automatically.
- Most persisting pain persists way longer than it has any physical reason for existing. It's become nervous system perception, no longer related to anything "real."

- "perception" of any sort is subject to many kinds of distortion.

Do you automatically assume the very worst possibility when you experience pain?

- This tendency has a name - it is called "**catastrophizing**."
 - It does not do your poor brain any good to have you giving it feedback thoughts that do *nothing* to reassure it. You can treat your own brain as you might treat an innocent child with large fears by soothing it instead. Ask yourself, "How dangerous is this, *really*?" You can safely assume, most of the time, that it's just your brain broadcasting pain, because it knows how, and can, and that non-medical persisting pain is usually completely meaningless. Just knowing this, and remembering to *think* it in the midst of a painful episode, will help your brain to settle back down eventually. Also, you will be building new and preferable pathways, helping your brain extinguish old ones. (This will take a long time and requires patience.)

B. Behaviors

Do you rely excessively on aids and appliances, guarding, deactivation, bed rest, avoidance?

- The only way you'll get on with learning to have, and teaching your brain to enjoy, new behavior which is not controlled by "pain"... is by *practicing* new behavior that is not controlled by "pain".

C. Compensation issues

Have you had difficulty obtaining compensation?

Has your case been managed badly in your opinion?

Have you opened multiple claims for compensation?

For litigation?

- Persisting pain often develops in those who have a sense of feeling helpless in the wake of external factors, especially factors pertaining to finance or livelihood. These are "social" issues; we all must deal with them, but we must learn how to not let them affect our own physiology. It can be done. Most people learn how effortlessly. Even if

you have had persisting pain for a long time, you can learn to develop boundaries within your own nervous system.

D. Diagnosis

Have you received unclear diagnosis? Multiple diagnoses?

Have you pursued multiple investigations?

Have you received recommendations to let pain "be your guide"?

To change your job?

- If you let non-medical, meaningless, persisting pain "be your guide", soon it may become your master. Better to become wise about pain, and go on to do what you want to do in life.

E. Emotions

Do you feel:

- **out of control?**
- **high distress?**
- **anxiety?**
- **pain-related anxiety with avoidance?**
- **depression?**

- These are feelings your nervous system finds threatening, that cause stress substances to be released, and are counter-productive for pain relief.

F. Family and friends

Are they over-supportive, rushing in to do things for you that you could do for yourself?

- You may need to set some new boundaries between yourself and others.

Are they punitive?

- You may need to set some new boundaries between yourself and others.

Are you isolated from family and friends?

- You may need to become more involved and active socially.

Do you have family and friends also with a history of ongoing disability and/or chronic pain, family and friends not working, financial strain?

- If so, this may have contributed to the way your brain learned to develop and express pain in an ongoing manner, long past its due date.

G. General

Is your work manual or heavy work, low-skilled work, high demand and low control?

Are you isolated at work?

Do you perform shift work or have unfriendly hours, non-supportive employer, low job satisfaction?

Do you have a history of multiple job changes?

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We will continue with more of the alphabet in a moment. But first, let's reflect...

All of these factors, A-G, can have an effect on pain, and on pain relief outcomes. But there are some in the psychological realm, as opposed to the biological or the social, over which you have sole jurisdiction, and over which you can learn to have some sway, right away.

Attitudes and beliefs are big big big factors. It takes becoming a detective sometimes to find out what these really are. Many of them become such background noise to life that we barely notice them, yet they are there, constantly feeding our

brain. Another word for this sort of background self-talk is non-conscious "rumination." Some kinds of "rumination" can be *ruination*.

What do you think is going on? Inform yourself. You may need to find someone who can help you frame your pain, maybe even your life, *differently*. This might take some time. But it's never too late.

What are your thoughts about your rehabilitation?

Emotions, your usual emotional weather pattern, is very important - not just to you but to your brain. The category, "Emotions", is connected to the category, "Attitudes and Beliefs" - there is a reciprocal relationship between the two.

It will help if you learn to acquire, then retain, a sense of control, a sense of positivity and optimism. If these feelings are *not* part of your usual emotional weather pattern, we will need to look a bit deeper to determine what factors might be preventing them, as these feelings are necessary for recovery from, and/or living more comfortably with, persisting pain. You do not have to become happy, cheery, or PollyAnna-ish. Just hope itself will suffice. But don't pin your hope on anyone outside yourself being able to "fix" you - getting better will be *your* job. You will use other people's input to your *own* end. First, get the end in sight (see attitudes and beliefs), then avail yourself of the help of others to help you get there. This is also known as "maintaining your own locus of control."

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Now, back to the alphabet for a little while:

H. How to downregulate arousal

Developing an effective arousal reduction strategy can provide you with a sense of efficacy during flare-ups, reduce the wind-up of pain, and enable you to maintain engagement in whatever you do.

A range of approaches is known to reduce physiological arousal. The aim is to increase the ability to *self*-regulate:

1. Reconceptualize the problem.

Ask yourself, "How serious is this, *really*?"

Remember that hurt does not equal harm.

2. Breathe.

- Help your nervous system to calm itself down. Learn how to do diaphragmatic breathing. Practice it regularly whether you are having pain or not. When you do have pain, it will help you relax with it, which may well help you to downregulate it.

- If you find the thought of learning how to do deep breathing too scary, then do this instead:
 - Feel the air as it goes by the end of your nose.
 - Feel how it feels on the way in.
 - Feel how it feels on the way out.
 - Compare the inbreath to the outbreath.
 - Then compare the outbreath to the inbreath.
 - Do inbreath and outbreath with your nostrils flared for a while.
 - Do inbreath and outbreath with your nose narrowed for awhile.
 - Compare how each way feels to you.
- It doesn't really matter WHAT you do with breath, *it matters that you pay close attention to it* for a little while, because **this gives your brain a rest.**
- When you are focused on something that's there all the time anyway, the brain will get a mini-holiday from all that "attitude and belief" stuff it has to put up with from you. That's the *real* trick... giving your *brain* a rest from *you*.

3. Psychological techniques improve self-efficacy and self-regulation:

Many on this list amount to no more than simple, but structured and purposeful, day-dreaming, which anyone can learn. Others on the list may require some instructing. But all are fundamentally simple ways for you to stop yourself from hurting your own brain. The poor brain churning out persisting pain already has more than it can handle. Give it frequent rests.

- imagery
- hypnosis
- tense-release relaxation
- deep breathing
- postural relaxation
- ideomotor movement
- cognitive coping - cue words, reframing, challenging assumptions
- graded exposure to disconfirm the hypothesis that the situation is harmful
- acceptance and mindfulness-based approaches

The simplest is to start with diaphragmatic breathing, because this has an immediate effect on heart rate and is quick, easy and inconspicuous. It can be integrated with any other activity you're doing. Get a good handle on being able to do it before you start moving at the same time. Then when you move, keep the breath moving. Reconceptualize discomfort as helpful, as a way your brain is asking you to move so that it can oxygenate its peripheral nerves, a way for your body to help itself rather than as something happening *to* you. Visualize yourself moving normally and gracefully/effortlessly. Change the image of pain into a colour that disappears. Make stuff up. It's perfectly fine. Engage your capacity for creativity. You do not need *anyone's* express permission. Just do it.

I. In the long term

A final few words about persisting pain:

1. Do NOT let pain be your guide

If you have persisting pain, do not let it "be your guide." Persisting pain has a way of becoming a cruel master. Letting non-medical, persisting, meaningless pain "be your guide" may actually increase your risk of developing ongoing pain-related anxiety and avoidance.

It's better to work to a quota - either time or number of activities - despite pain fluctuations. Pain fluctuates for so many reasons including distress, fatigue, attention, physiological arousal - so much that it's not even close to being an accurate measure of 'how much to do'. Setting the baseline quota at a reasonable level is also important. Recognize if you are that person who will push yourself really hard and become disappointed at how little you seem to be able to manage and how slowly you progress. Recognize if you are that person who would rather sit tight, *not* move, and let your world shrink - set yourself small goals then *move* toward them.

2. Keep an activity diary

Keeping a written record of some kind will help you see your pattern over time. Write down what you did in the course of a day, and how you felt about it. Keep it brief, just a few lines, and write something down every single day. Over time you will notice that in spite of ups and downs, there will be steady (even if slow) progress. You will have charted your own brain's neuroplastic capacity *coupled with* your own determination. Nothing will reinforce you better or be more encouraging than a written record of your own efforts and successes.

A natural tension exists between encouraging your brain to neuroplasticize gradually in the direction you want, and at the same time not using pain as a guide or over or underdoing. You will need to find your own edge and stay on it. You can do this. Everyone has to learn to do this anyway, eventually: there are few more compelling reasons, with more urgency attached, than the persistence of *pain*, and there's no time like *now*.

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Read her blog, [Health Skills](#) .

