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Mindfulness in the Treatment of Trauma-Related Chronic Pain

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When we experience bodily pain, we naturally assume that it's due to an injury, illness, or structural abnormality. And while most acute pain indeed signals such conditions, countless patients suffer from chronic pain which has little or no relationship to tissue damage. The origin of this pain often lies in psychological trauma.

A steadily growing body of research demonstrates that psychological trauma is a risk factor for developing chronic physical pain. Studies show this association for a remarkably wide variety of syndromes, including chronic regional and widespread pain (Ablin et al., 2010; Kendall-Tackett, Marshall, & Ness, 2003), chronic low back pain (Schofferman, Anderson, Hines, Smith, & Keane, 1993), chronic pelvic pain (Roelofs & Spinhoven, 2007), self-reported arthritis (Kopec & Sayrn, 2004), chronic orofacial pain (Burris, Cyders, de Leeuw, Smith, & Carlson, 2009), fibromyalgia (Naring, van Lankveld, & Grenen, 2007; Amital et al., 2006), and chronic headaches (Tietjen et al., 2009a, b, c; Peterlin et al., 2009).

How Might Psychological Trauma Cause Physical Pain?

At first glance, the mechanisms by which psychological trauma predisposes someone to chronic physical pain seem mysterious. In fact, many medical practitioners, and most patients, are reluctant to consider psychological trauma as a likely source. This is partly because we all learn early in life to associate physical pain with tissue damage. After all, when we cut our finger, the relationship between seeing blood and feeling pain is unmistakable. It's also partly due to the remarkable progress medicine has made in developing imaging techniques that reveal

structural abnormalities, which physicians naturally assume are the cause of patients' distress. Yet without understanding the role of psychological trauma in chronic pain, the likelihood of successful treatment for many people is seriously diminished.

There are several ways that psychological trauma predisposes patients to developing chronic pain, and by which that pain in turn becomes psychologically traumatizing, further perpetuating the disorder. Fortunately, mindfulness practices can be enormously useful in interrupting these processes.

Autonomic Reactivity

People with trauma histories often experience ambiguous stimuli as dangerous, and hence are prone to autonomic arousal (Tucker, et al., 2010; Pole, et al., 2007). When we walk in a dangerous neighborhood at night and hear a rustling in the bushes, we're likely to react with fear. The same rustling in a safe neighborhood may escape our attention entirely. People who have experienced psychological trauma rarely feel themselves to be in a safe neighborhood.

This assumption of danger becomes a risk factor for chronic pain. All mammals share an ancient, sophisticated emergency "fight-freeze-flight" response system. When a mammal is threatened, its sympathetic nervous system and hypothalamic-pituitary-adrenal (HPA) axis are activated, resulting in increased epinephrine (adrenaline) in the bloodstream, and many other physiological changes (Sapolsky, 2004). Respiration, heart rate, body temperature, and muscle tension all increase—the better to fight an enemy or flee from danger.

Imagine, for example, that a rabbit grazing in a field notices a fox. It freezes, hoping not to be noticed, while becoming more vigilant and physiologically aroused in preparation to flee (rabbits aren't big fighters). In this state of high arousal and preparation for action, both sympathetic and parasympathetic branches of the autonomic nervous are highly activated, with

the faster-acting parasympathetic vagus nerve applying a “brake” that can be rapidly withdrawn to release the full force of the sympathetic activation it holds in check. If the fox wanders off, soon the rabbit’s sympathetic activity will decrease while parasympathetic nervous system helps the animal calm down, until its physiology returns to baseline. This system works wonderfully for rabbits, and undoubtedly has contributed to their survival.

But what if the rabbit were to possess a highly evolved cerebral cortex, allowing for language and complex symbolic, anticipatory thought? Once the fox left, the rabbit might think: “Will he return?” “Will he find my family?”—not to mention whether it can save up enough carrots for retirement. Such thoughts would continue to activate its fight-or-flight system, which would remain stuck “on,” eventually causing what has been called an *allostatic load*—stress-induced strain on organ systems that can lead to a host of physical ailments (McEwen, 2000).

Consider further what might happen to such a rabbit that had experienced a trauma, such as actually being captured by a fox before narrowly escaping. It would regularly imagine foxes in the bushes, so that virtually any ambiguous situation would throw its body into a state of high arousal. This is, of course, what happens for many human trauma survivors. They are repeatedly “triggered” by ordinary life events that others see as nonthreatening.

Illness Anxiety: It’s Probably Something Serious

Of all the stimuli that can trigger a fight-freeze-flight response, the most problematic in chronic pain syndromes is often the pain itself. We see in mindfulness practice that the body produces an endless stream of sensations—aches, itches, tingles, numbness. If we’re young, have lived relatively safe lives, and come from ethnicities that don’t overly attend to bodily sensations, we tend to interpret them as “probably nothing.” If, however, we’re older, have encountered serious medical problems, or have had other reasons to see the universe as threatening, we tend

to interpret the same sensations as indications of injury or illness. A critical factor in developing a chronic pain syndrome is the belief that the body is damaged. It is only by realizing that pain isn't actually due to illness or structural damage, and therefore needn't be feared, that patients can resume normal activity and by so doing resolve their pain syndromes. In my clinical work, I find that many trauma survivors find it difficult to believe that their pain might be harmless, and they tend toward hypervigilance, scanning the body for signs of injury or illness, reacting to the sensations they notice with fear.

Often, believing that pain indicates a serious problem leads to kinesiophobia (fear of movement) which causes the body to lose strength, flexibility, and endurance; predisposing it to injury. Then the pain itself, if interpreted as dangerous, becomes another trigger for autonomic arousal.

There are other trauma survivors, however, who become dissociated from their bodies, hypo-aroused, or depressed, and may encounter an opposite problem—they may fail to notice pain signals that require attention. While these individuals may not have difficulty with hypervigilance, they are often unaware of emotional reactions, which, as we'll see shortly, can also predispose them to chronic pain.

From Fear to Pain

There are two major ways that fear can create or exacerbate bodily pain. The first involves muscle tension. Take a moment to act terrified. You'll probably notice that your skeletal muscles contract. And tight muscles can be painful—whether it's the aching tightness in our neck and shoulders after a stressful day, or the intense pain of a Charlie horse when a calf muscle goes into spasm. If we then become frightened of the pain, our muscles tighten further, creating a

vicious cycle. A wide variety of chronic neck, back, jaw, foot, pelvic, and chest pain is caused this way.

Fear also amplifies the subjective experience of pain. We've known for decades that the experience of pain is not simply proportionate to the degree of disturbance to tissues (Melzack & Wall, 1965). People experience a given stimulus as far more painful if they are frightened than if they feel safe (Beecher, 1946; Burgmer et al., 2011). In a classic experiment, subjects' hands are placed in ice water. If they're told that the experiment will only last a minute, their pain ratings at 30 seconds are relatively low. If told, however, that they'll need to keep their hands in the ice water for 10 minutes (a more frightening prospect), pain ratings at 30 seconds are much higher.

Difficulty Self-Soothing

A critical variable in whether emotional distress passes or persists involves our capacity to self-soothe. We all regularly become upset, but some of us are much better at self-soothing than others. Childhood trauma survivors often have particular difficulty self-soothing, because many of them weren't supported in learning self-regulation skills or lacked caregivers who could modulate their arousal through caring presence. Without effective strategies to manage discomfort, or memories of "it's OK sweetheart" in which to take refuge, people with early trauma histories typically become quite distressed about pain, which in turn makes it persist.

Fear of Unwanted Mental Contents

All animals have an instinctual aversion to pain. Humans have particularly sophisticated ways of trying to avoid it, especially when that pain is emotional or psychological. We employ a wide variety of strategies to distract ourselves or actively push out of awareness painful thoughts, feelings, images, instinctual urges, and memories. But these efforts are usually only partially effective: *when we bury feelings we bury them alive*. Disavowed mental contents are easily

reawakened, and when they get close to our awareness, we feel fear. Freud (1926) called this fear “signal anxiety.” We respond to tigers within with a system designed for tigers in the outside world.

Not surprisingly, there is evidence that (1) people who have difficulty acknowledging affect suffer disproportionately from stress-related disorders (Schwartz, 1990), (2) being unaware of feelings can interfere with successful rehabilitation from chronic pain syndromes (Burns, et al., 2012), and (3) learning to identify and safely express emotion can reduce the frequency of symptoms (Pennebaker, Keicolt-Glaser, & Glaser, 1988).

Our propensity to feel anxiety when unwanted mental contents are aroused is proportional to how much of our experience we’ve split off or disavowed. Trauma survivors usually have many memories, thoughts, and feelings that their minds work to keep out of awareness. This is another factor predisposing them to fear, and hence to chronic pain syndromes that are caused, maintained, or exacerbated by such fear.

As mentioned earlier, some trauma survivors don’t experience much overt fear; but experience instead deadening, numbing, and hypo-arousal. Yet many of these patients also suffer with chronic pain. Here the mechanism of action is less clear—it is as though the acute emotional pain one might expect to accompany the memory of trauma manifests instead as physical symptoms. One explanation is that in trauma, the body can become stuck in a freeze response, causing it to shut-down, which over time leads to chronic pain or other organ system dysfunction. Treatments such as somatic experiencing (Levine, 2008; Scaer, 2007) which attempt to release such freeze responses by helping people reconnect with disavowed memories and associated feelings have received considerable anecdotal support.

Mindfulness Practices

For any given patient, one or more of the mechanisms just described may be most salient to their pain condition. Mindfulness practices, in conjunction with other interventions, can be used to address any or all of them in the context of a comprehensive approach that includes (1) a *medical evaluation* to rule out treatable injuries or illnesses and give the patient authoritative permission to move freely; (2) *cognitive restructuring* to understand the role of tension, fear, and behavioral avoidance in the condition; (3) *resuming normal activities* to treat kinesiophobia and to regain muscle strength, endurance, and flexibility; and (4) *working with negative emotions* to understand and deal with the role in the disorder of psychological factors, including thoughts, feelings and memories associated with trauma. One such program, called *Back Sense*, integrates cognitive, psychodynamic, behavioral, and systemic interventions along with explicit teaching of mindfulness practice to treat chronic back and neck pain (Siegel, Urdang, & Johnson, 2001). Patients can participate in the program following a self-treatment guide¹ or by working with a mental health or rehabilitation professional.

Mindfulness for Autonomic Reactivity

Several controlled studies and countless anecdotal reports suggest that mindfulness practices can help us to be less physiologically reactive to perceived threats (e.g., Brewer et al., 2009; Goldin & Gross, 2010). How does this work? First, by practicing *being with* unpleasant thoughts, feelings, and sensations when they arise, allowing them to come and go, we are less inclined to generate strong aversion responses, and therefore less likely to become aroused by a desperate desire to escape discomfort. Second, by gradually learning to see all phenomena, pleasant and unpleasant, as changing impersonal events, we're more likely to allow events to take their course without resistance. Finally, by seeing ourselves as part of the larger world, and

¹ *Back Sense: A Revolutionary Approach to Halting the Cycle of Chronic Back Pain* (Siegel et al., 2001)

noticing how our sense of a separate self is constructed moment by moment, we become less preoccupied with self-preservation and have fewer defensive arousal reactions.

Mindfulness for Illness Anxiety

As long as a patient believes that his or her chronic pain is due to a serious illness or injury rather than the effects of anxiety and muscle tension or a persistent freeze and shut-down response, he or she is unlikely to become free of a trauma-related chronic pain syndrome. Such beliefs increase fear, disrupting normal body functioning by further tensing muscles, disturbing other organ systems, amplifying subjective pain signals, and prompting avoidance of the normal life activities that are necessary for health.

A competent medical evaluation, ideally by a physician who understands the role of psychological factors in chronic pain, is required. I usually ask patients to inquire whether the doctor has “evidence that were I to engage in normal life activities I’d irreparably damage my body.” Since there’s now considerable data, particularly in the case of the neck and back, that it’s safe to exercise vigorously in the presence of chronic pain (e.g. Chou, et al., 2007, Rainville, Sobel, Hartigan, Monlux, & Bean, 1997), most physicians will respond to this question with permission to move normally.

Once such permission is granted, for hypervigilant patients, psychoeducation about the stress-response system and the role of fear in tensing muscles, disrupting normal body functioning, and amplifying pain sensations is usually needed. Mindfulness practices can provide enormous support for this, by illustrating how often worried pain-related thoughts arise (usually every few seconds) and how much tension is held in the body (usually a lot). They can foster and support the ability to observe the interplay among pain, fear, and behavior, illuminating the role that thoughts and emotions play in the pain.

While the effect is gradual, mindfulness practice can also increase cognitive flexibility. By observing the arising and passing of thoughts without following or judging them, patients become less identified with their content. They see how thought is socially influenced—how their mind is full of ideas picked up from doctors, friends, and others. Developing such metacognitive awareness helps chronic pain patients consider that their assumptions about structural damage or disease are changeable constructs, not objective conclusions about reality.

Mindfulness for the Experience of Pain

There is a well-known sutra, called the story of the two arrows or two darts, in which the Buddha describes our typical response to pain:

When touched with a feeling of pain, the uninstructed run-of-the-mill person sorrows, grieves, & laments, beats his breast, becomes distraught. So he feels two pains, physical & mental. Just as if they were to shoot a man with an arrow and, right afterward, were to shoot him with another one, so that he would feel the pains of two arrows (Bhikkhu, 2012, p.1).

This ancient realization—that the sensation of pain is followed immediately by a response of aversion and suffering—is easily observed in mindfulness practice. When I introduced this idea to a patient who works at MIT, he said (as people from MIT often do) “there’s a mathematical formula for that.” He went on to present it: $pain \times resistance = suffering$. So when pain is very intense—we’ve literally been shot by an arrow—suffering will likely be great unless we’re extraordinarily skilled at acceptance. But when pain isn’t too severe, by lowering our resistance, we can alleviate suffering. This is because fear and resistance cause painful muscle tension and amplify the subjective experience of pain. Mindfulness practices, by training the mind to *be with* and *accept* discomfort, reduce tension and the amplification of pain sensations created by fear.

Mindfulness for Self-Soothing

Of the three core aspects of mindfulness practice, (1) concentration (or focused attention), (2) mindfulness per se (or open monitoring), and (3) acceptance (Siegel, 2010; Germer, 2013) the last is most helpful for self-soothing in the face of chronic pain. Practices of loving-kindness or *metta* (Siegel, 2010) and self-compassion (Germer, 2009) can help traumatized patients develop a sense of safety in the midst of physical discomfort. The very structure of meditation, where we adopt a dignified physical posture and sit with the intention to open to experience, can provide a form of the emotional “holding” famously described by D.W. Winnocott (1960).

Mindfulness of Unwanted Mental Contents

For many patients, learning that their pain is not due to serious disease or tissue damage, seeing for themselves the roles of fear and behavioral avoidance in their problem, and resuming full normal life activity is sufficient to free them from their pain. For others, especially those with a trauma history, a return to normal functioning is not enough. Here emotional difficulties beyond concerns about pain often contribute to persistent fear and hypervigilance, which in turn are perpetuating the disorder. Exploration of unwelcome emotions is usually needed, and mindfulness practice can provide support.

If you lie on a psychoanalytic couch long enough and say whatever comes to mind, sooner or later everything you’ve ever wanted *not to* think, feel, or remember will come into awareness. Similarly, if you spend enough time mindfully following the breath or other object of awareness, sooner or later disavowed thoughts, feelings, and memories will surface.

Mindfulness practice not only brings previously unnoticed or rejected mental contents into consciousness, but it helps patients to tolerate them. As we sit with difficult material, and see that it arises, is experienced, and eventually passes, it becomes easier to bear. Anxiety about

what might arise drops away as we become increasingly comfortable with the contents of our minds.

Do No Harm

For trauma survivors who habitually block out painful memories or emotions, the power of mindfulness practices to re-integrate split off contents can also pose serious risks. In 1976, I worked at a psychiatric treatment facility near the Insight Meditation Society in Barre, MA. We saw several patients who had psychotic breaks or were seriously destabilized during silent meditation retreats. Even outside of a retreat setting, some people will become overwhelmed after only a few minutes of following their breath. For these people, the ratio between the “holding” effects of the practice and its power to bring into awareness disavowed experience is tilted too far toward opening the door to unwanted contents.

Patients most at risk for being destabilized by mindfulness meditation include those with unresolved trauma histories, rigid personality organizations, fears of fragmentation or loss of sense of self, or who are suffering from psychosis. With all of these populations, clinicians need to be particularly careful about which practices they introduce when.

A good rule of thumb is to be sure to establish safety before engaging in practices that work to reintegrate split off contents (Herman, 1997; Cloitre, Cohen, & Koenen, 2006). A wide variety of approaches, including establishing a supportive therapeutic alliance; creating stable, safe living arrangements; cultivating a social support network; and teaching CBT techniques that foster emotion regulation and rational thought; can all contribute to such safety.

Another way to help traumatized chronic pain patients establish safety and not be overwhelmed is to introduce mindfulness exercises that turn the attention toward the outer, rather than the inner world. Relatively safe options include walking meditation, nature meditation

(attending to the sights and sounds of trees, clouds, birds), eating or listening meditation, and mindful yoga. These practices are not only unlikely to destabilize a patient, but can be used in difficult situations to provide stabilization, as illustrated in the following clinical encounter:

Andy, a long term patient with a terrible trauma history, came to my office looking particularly distressed. Our early work had focused on his chronic back and bladder pain, which he had successfully resolved by understanding these to be psychophysiological disorders; resuming normal activity; learning to accept, rather than fight the pain sensations; and turning his attention to other thoughts and feelings that he might be having difficulty acknowledging.

Andy had grown up in a very abusive household and readily became overwhelmed when people spoke harshly to him. He had recently had an encounter with someone who bullied him, was now consumed with anxiety, struggling against persistent, intrusive images, and was becoming concerned about a new bout of back pain and gastrointestinal distress. After discussing what had brought him to this state, I invited him to try a practice to help him better tolerate his experience. I asked him to stand with me at the window and look at a tree—to start at the top and describe everything he saw in detail—the leaves, branches, colors, and textures. Then we moved on to another tree and eventually to everything else we could see. I told him we weren't trying to make her anxiety go away, wipe out feelings about the hostile encounter, get rid of the intrusive images, nor eliminate his physical symptoms; but rather to bring some of his attention to the reality of the external world here and now so that he could notice his thoughts, feelings, and sensations arising against a backdrop of relatively safe and stable present reality. After focusing on nature in this way for a little while, he began to feel more confident. Since our session was ending, I suggested he spend the next hour walking around the neighborhood continuing to notice the trees and plants, bringing his attention to them as we had done at the window. He did

this, and when I saw him at my next break, he felt OK about driving home and continuing with his day. The practice had helped her establish a sense of safety.

Mindfulness-Based Programs for Chronic Pain

One of the first medical treatment programs explicitly to teach mindfulness to patients, Mindfulness-Based Stress Reduction (MBSR), was designed for the management of chronic pain (Kabat-Zinn, 1982). Since then, mindfulness-based programs have been used to treat a wide variety of pain syndromes. In the early years, encouraging outcomes were frequently reported, but studies often lacked control groups or randomized designs (see Baer, 2003; and Grossman, Niemann, Schmidt, & Walach, 2004, for reviews). More recent studies are often better controlled (see Veehof, Oskam, Schreurs, & Bohlmeijer, 2011, and Siegel, 2013, for reviews). Overall, they demonstrate that mindfulness practice yields modest benefits in reducing pain intensity, and more significant benefits in improving other quality of life measures. It's likely that the limited benefits of mindfulness meditation in reducing pain intensity is due to the fact that most studies involved teaching mindfulness alone, rather than integrating it into a more comprehensive rehabilitation program that addresses patient's beliefs about their pain, fear of movement, and the effects of anxiety related to disavowed thoughts, feelings, and memories. Anecdotal evidence indicates that such a more comprehensive approach can be quite effective (Siegel, et al., 2001).

Programs such as MBSR are usually conducted in groups and include considerable meditation practice involving internal objects of awareness, such as the sensations of the breath. These programs can therefore readily flood traumatized individuals with unwanted thoughts, feelings, and images. Individual treatments, in which the type of mindfulness practice can be tailored to the changing safety needs of the patient, are probably better alternatives for traumatized populations.

Psychological and Neurobiological Mechanisms of Action

As mindfulness practices are being increasingly used for chronic pain, and evidence is mounting for their efficacy, researchers have begun investigating their mechanisms of action. One set of studies measures chronic pain patients' level of mindfulness to see how it relates to their physical, social, cognitive, and emotional functioning. Data suggest that higher levels of mindfulness correspond to better functioning, primarily by lessening pain-related anxiety and patterns of avoidance and disability (Cho, Heiby, McCracken, Lee, & Moon, 2010; Schutze, Rees, Preece, & Schutze, 2010).

Another area of investigation has looked at how experienced meditators react to experimentally induced pain. The evidence suggests that (1) experienced meditators perceive painful stimuli as less unpleasant than inexperienced controls (Brown & Jones, 2010); (2) experienced meditators report stronger tendencies to non-reactively observe pain sensations (Grant & Rainville, 2009); (3) open monitoring (mindfulness per se) results in a significant reduction of pain unpleasantness among experienced meditators, but not novices (Perlman, Salomons, Davidson, & Lutz, 2010); and (4) experienced meditators, but not inexperienced controls, have significant decreases in anticipatory pain anxiety when in a mindful state (Gard, et al, 2011). Interestingly, one study found that while concentration increased pain intensity for inexperienced controls, it did not do so for more experienced meditators—suggesting that the latter group was able to *be with* painful stimuli without having a strong aversive reaction to it (Grant & Rainville, 2009).

The central mechanism suggested by all of these studies parallels the Buddha's story of the two arrows. By accepting pain sensations, rather than fighting, fearing, or trying to avoid

them, we are able to tolerate more pain with less distress, whether the pain is caused by a medical condition or induced in the laboratory (Thompson & McCracken, 2011).

Another exciting line of research examines the brain regions that are activated when subjects adopt different meditative attitudes toward experimentally induced pain. Two of these attitudes are (1) concentration or focused attention, in which we repeatedly return attention to a single object, and (2) mindfulness per se or open monitoring, in which we attend to whatever arises in awareness (Lutz, Slagter, Dunne, & Davidson, 2008). Investigators have found that experienced meditators who were exposed to painful stimuli while practicing open monitoring had decreased activity in the lateral prefrontal cortex (IPFC), an area associated with executive control and cognitive evaluation (Grant, Courtemanche, & Rainville., 2011; Gard et al., 2011). The meditators simultaneously had increased activation in the posterior insula (Grant, Courtemanche, & Rainville., 2011; Gard et al., 2011), which is understood to be involved in interoceptive and sensory processing (Craig, 2009). These findings suggest that mindfulness practice decreases the experience of pain and pain-related anxiety through increased processing of the pain sensations themselves, coupled with letting go of resistance. Researchers seem to be observing on a neurobiological level how experienced meditators experience less distress by opening to pain sensations with acceptance.

Mindfulness Practices for Chronic Pain

The following practices can be offered to patients within the context of comprehensive treatment for chronic pain as outlined above. The first exercise is designed to open to the experience of pain while letting go of habitual fear and other aversion reactions. Because it involves an inward focus, it should be used cautiously with trauma survivors who struggle with

split-off, disavowed thoughts, feelings and memories (further suggestions for the use of this meditation can be found in Siegel, 2010):

Separating the Two Arrows²

Begin by settling into your meditation seat and finding your breath. First simply attend to the breath, wherever it's most clearly felt in the body. Every time your mind wanders away from the sensations of breathing, gently bring it back. Try to observe the breath with as much precision as possible. Notice the texture of each breath and examine its complex and varied qualities. See if you can develop an attitude of interest or curiosity toward all of these sensations. (Continue for 10–15 minutes.)

Now that the mind has settled a bit, begin to shift your focus to wherever you feel discomfort, whether mild or strong. Allow the breath to settle into the background and bring your attention to the painful or uncomfortable sensations. Begin by attending to the general area of the pain. Relax and settle into the physical sensations. Try to carefully observe their nature—whether burning, tight, piercing, dull, sharp, etc.

Next, narrow your attention to zero in on the particular spot in your body that hurts the most. Try to bring the same attitude of precision, interest, curiosity, and acceptance to the discomfort that you brought to the breath. You're not trying to change it, but rather to just experience it clearly. Notice how the sensations vary subtly from moment to moment. Perhaps one second they throb, while the next they burn or ache. See if you can observe that “pain” is actually a series of momentary sensations strung together like frames in a movie, creating an illusion of continuity.

² Adapted with permission from *The Mindfulness Solution: Everyday Practices for Everyday Problems* (Siegel, 2010). Available free of charge in audio at www.mindfulness-solution.com.

If the pain is very intense, and the mind recoils from the pain sensations, experiment with bringing your attention back to the general area of the pain or even back to the breath for a while, before returning your attention to the pain's precise source. Shifting your focus in this way will help you stay with the experience longer. As you stay with the pain sensations, notice any thoughts that arise in the mind. You might experiment with labeling them: fearing, hating, worrying, etc. The idea is to notice that the thoughts come and go independent of the pain sensations. (Continue for the next 10 minutes or so.)

Urge Surfing for Pain³

This practice is designed to help patients overcome kinesiophobia and engage in normal physical activity. It is presented here to deal with pain that comes on when sitting, though it can be adapted to most situations where pain interferes with an activity:

Close your eyes and first bring your attention to your breath for a few minutes. Next allow yourself to be with the pain sensations, attending to them with curiosity and interest, as in the previous exercise. See how they change from moment to moment.

If the urge to get up or stop your activity arises, notice exactly where in your body you feel the urge. Bring your full attention to it, noticing its intensity and texture. See how the urge to get up or stop is distinct from the pain sensations themselves.

Now return your attention partially to your breath. Using your breath as a surfboard, ride each wave of urgency from its beginning as a small wavelet to the point where it crests. Allow each wave to rise up as high as it wants, trusting that it will reach a crescendo and then subside again.

Conclusion

³ Adapted with permission from *The Mindfulness Solution: Everyday Practices for Everyday Problems* (Siegel, 2010). Available free of charge in audio at www.mindfulness-solution.com.

While many instances of pain are indeed due to the effects of illness, injury, or structural abnormality, others are caused or maintained by psychological processes. For individuals with significant unresolved trauma, who struggle to keep painful thoughts, feelings, and memories out of awareness, or who generally experience the world as threatening, the likelihood of getting stuck in such pain syndromes is increased. Luckily, mindfulness practices introduced by a skilled clinician, in the context of a comprehensive rehabilitation program, can help many people to break free of these disorders.

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