

Understanding Why Pain Persists:

Pain is an every day occurrence that affects us all. Accident and injuries that cause pain are unfortunately a feature of a daily life. When these occur the expectation is that the pain will rapidly settle and things will return to normal. Sometimes this requires medical treatment, but on other occasions the pain gets better by itself.

Quite frequently, however, the pain does not settle down as expected, and may even worsen. When this occurs, it is often of major concern for the individual and their family and they will start seeking medical opinions or therapies to ease the pain. For back or limb pain (for example low back pain, whiplash, frozen shoulder etc., conditions termed '**musculoskeletal**') this may involve a visit to the GP or independent therapists such as chiropractors, osteopaths, or physiotherapists. Alternatively, it may involve a specialist opinion and ongoing investigation and treatment in a hospital setting.

The expectation, however, is that with treatment the problem will get better.

For the specialist in Pain Management, who spends most of their time treating people with chronic pain, it is only too apparent that there are many, many occasions when things do not work out like this: the pain just does not settle down and resolve as expected. This does not mean that there is serious pathology or something untoward going on. Mostly we just don't know why pain persists in such cases, but it is clear that it is not related to ongoing damage.

For the individual, however, who has had no previous experience, it is understandable that they feel this is unusual and 'just not right'. The message they have got from all they have read and been told is that pain should always have a clear-cut cause and a medical solution. When tests are negative and treatment does not cure the symptoms they are left with the feeling that that something must be seriously wrong. To them the persistence of pain is of great concern and is perceived as a sign of injury or pathology. Often such sufferers face a growing disillusionment with the medical system and sense of disbelief that their pain cannot seemingly be solved. If they are unlucky enough to experience a change in their mood and become depressed due to their limitations and incapacity, without doubt the pain becomes even worse. This is at least in part due to the exhaustion of their coping resources, which become run down if not recharged.

We now know that chronic pain is poorly related to tissue damage. In the scenario outlined above, for the individual the pain may not have changed, or changed so slowly that they feel certain that it still clearly related to the initial problem. They know they did something, or something happened when the pain started, and can't believe that it is not still the same problem. However, we now understand that subtle changes within the body can be significantly adding to the overall pain and unpleasant sensations felt by the sufferer. For example, pain in the back causes automatic muscle tightening, which alters posture. In the early stages, these are protective, preventing the back from moving into the painful area. However, over a passage of weeks, and certainly months, such changes can become habituated and in effect permanent.

Electrical tests show that the muscles of chronic back pain sufferers work much more actively even during rest, than ordinary individuals. It is now realised that this too adds to the pain. Thus, as the pain goes on, especially when it is in the back, alterations to the way the spine functions contribute to the pain. This is commonly

seen when someone experiences pain in either neck or back, and then goes on to develop symptoms in the other area. The whole spine works as one functional unit and the stronger and more flexible the back is, the less likely it is to be painful. Unfortunately, the first episode of back pain can lead to back that it becomes stiff, weak and deconditioned. Such a back is not only vulnerable to further jolts and jars, but also by failing to move normally, becomes fixed in the limited range that the person becomes comfortable with. Unfortunately, as the months go by, the narrow range of movement tends to become even narrower. Efforts on the part of the sufferer to try and do more or move more vigorously only produce further pain tending to confirm to them that this such activity is bad for the back leaving them unwilling to try again in the future. In this case **fear** and **learning** also play a role in the limitation of function.

It is also clear that a person's understanding and **beliefs** about their back, and the cause of their pain, has a significant bearing on how they respond. The person who is told that they have damaged their back and that rest is helpful is obviously going to behave differently to a person who is told that they have a muscle sprain and the that best thing to do is to keep the back moving and active, as they would for a sports injury. The understanding of the pain, fears, beliefs and concerns of the sufferer turn out to be crucially important in how they react and respond.

It is also true that a tendency to worry and be concerned about bodily symptoms does the sufferer no favours in this situation. Often people who get into trouble with back pain are those who acknowledge that they are worriers and who get stressed by things. It is clear that in this situation worries and concerns about pain lead to a muscle tension and worsening symptoms, in effect turning up the volume on the pain.

Pain often causes **sleeplessness**, which leads to daytime fatigue and lowering of motivation and energy. This makes matters worse still. Such a situation also often leads to **depression** (up to 50% of the people attending pain clinics are clinically depressed as measured by recognised tests and questionnaires) as a result of which the situation becomes even worse. It is now understood that depression causes an alteration to the chemicals in the brain, which leads to change in the way the pain is perceived. Not only is the depressed person poorly motivated to get up and do things that cause pain, but also the essential pain experience within the brain itself is also altered.

In our experience pain is never 'in the mind'. All patients that we see have real pain. They have sources of pain within the back or neck, (or other painful areas) but the pain is made worse by the secondary problems outlined above, and the psychological response to it. The years of pain and the problems coping with it have led to **secondary deconditioning** adding to the causes of pain and changes within the nervous system turning up the volume control on the symptoms.