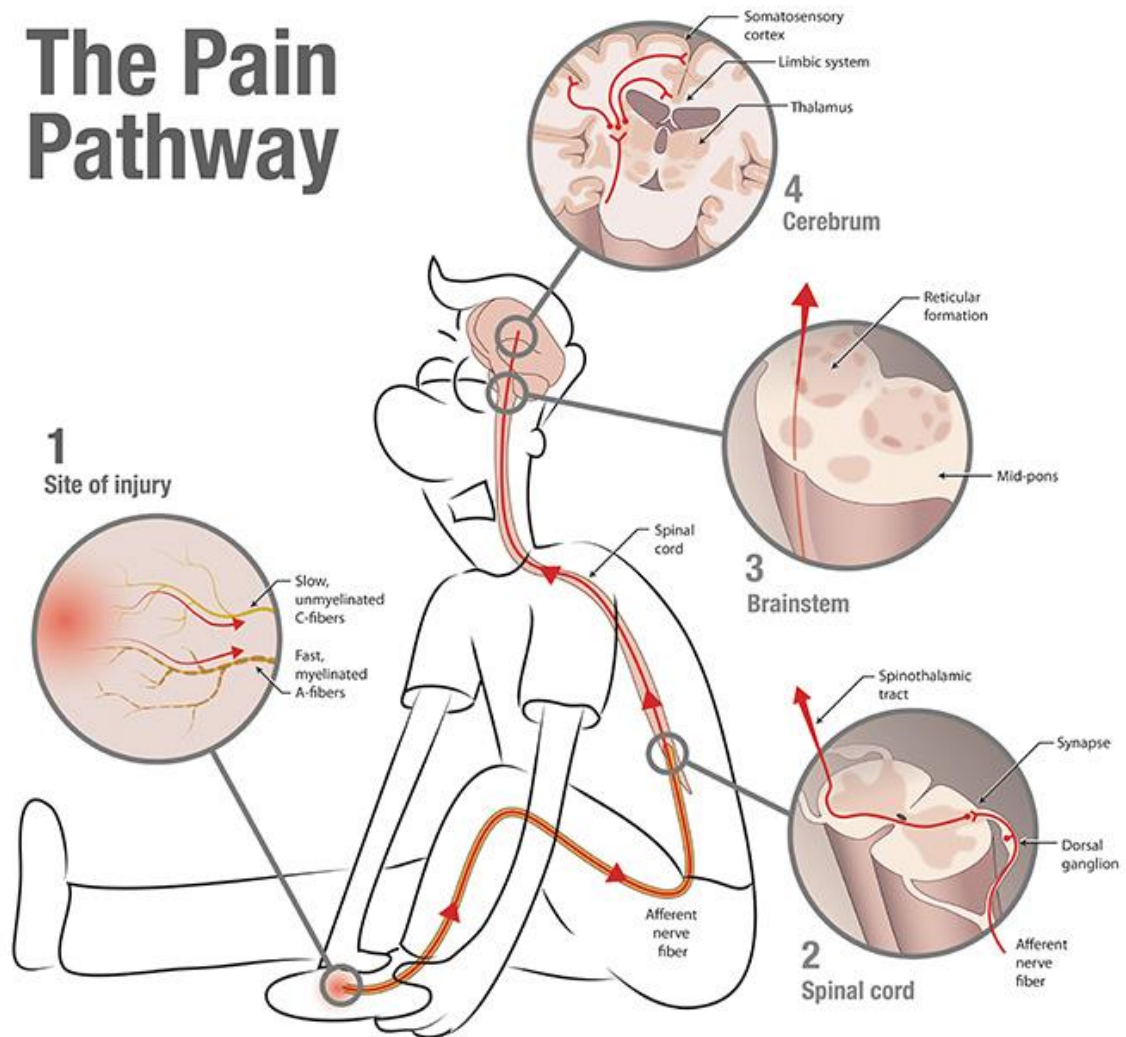


Week 2: Pain and sensitisation

The Pain Pathway



Pain is an unpleasant sensory and emotional experience associated with actual or potential tissue damage or described in terms of such damage.

Recent pain is a result of hurt and harm to the tissues and it is a warning signal. It usually resolves with healing or removal of the cause for the pain. It usually settles down with simple medications.

Persistent pain is pain that has lasted for longer than 3 months after the usual recovery period for an illness or injury. Persistent pain can be felt in a specific part of the body, e.g. back, shoulder, legs, or more generalised, throughout the body.

The pain may be continuous or occasional, you may feel more sensitive to pain and it may sometimes be prone to flaring up or getting worse very quickly. Despite treatment attempts with medication, rest and relaxation, hot baths, massage or invasive interventions such as injections or surgery, persistent pain may not be effectively relieved.

There is still a lot that is not understood about chronic pain and the pain system. For example, if a prolapsed disc is taken out, you would expect the pain to go away after the surgery. But in many cases the pain does not change, and the patient experiences just as much pain as they had done before the operation.

This is thought to be secondary to nervous system sensitisation. This is basically 'winding up' of the sensory signals to brain causing pain. 'Winding down' of these signals are the key concepts of treatment and psychological concepts such as 'mindfulness' has significant role in controlling this. Neuropathic medications such as anti-depressants or anti-epileptics also help to reduce the pain through winding down the brain activity. There is good evidence that general physical activity that you enjoy would have significant impact on your persistent pain.

Experience of pain always stays with us with a kind of memory. Thinking of the pain before it happens can make it feel worse e.g. the experience of having an injection is worse if you think about or look at the size of the needle.

Depending on the situation, a person's threshold for feeling pain may be little or excruciating. For example, during a rugby match a player may be injured but not feel significant pain until after the match. This is caused by a hormone called adrenalin, which prepares our body for action in circumstances which are perceived as risky.

However, on the other hand, a person who is feeling very anxious, tense and wound-up in another circumstance may not be able to tolerate even the slightest touch. So a person's thoughts and mood can make a difference to how they feel pain.