New episode of low back pain: Peripheral nociceptive input

Activation of the central pain neuromatrix

Cortical reorganisation
Change in cortical representation of somatosensory input
Implicit pain memory formation

Previous LBP

Distress Somatisation and hypervigilance
Depression

Catastrophic thoughts and fear

Motor control changes Increased guarding and co contraction

Change in internal body schema Proprioceptive deficiency (Inability of vision to compensate)

Sensory-motor incongruence with back movements and functional activities

Feels of foreignness and peculiarity

Central sensitisation

‘cortical’ or pathological pain

Activation/LTP of DLPFC

DLPFC degeneration

Intra-/sub-cortical Facilitation / decreased inhibition

Decreased disengagement from pain

Increased mPFC activity

Enhanced spontaneous pain

Increased guarding and co contraction

Feelings of foreignness and peculiarity

Central sensitisation

Increased mPFC activity

Enhanced spontaneous pain

Central sensitisation

Increased guarding and co contraction

Feelings of foreignness and peculiarity

Central sensitisation

Increased guarding and co contraction

Feelings of foreignness and peculiarity

Central sensitisation

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