Chronic pain in Spinal cord lesions

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Abstract

Pain is an unpleasant sensory and emotional experience associated with actual or potential tissue damage. Pain is always subjective and the degree of sensation does not depend only on tissue damage but on many factors related to the individual ant the environment.
More than 60% of patients with SCI suffers from pain. Individuals with SCI can experience several types of pain such as nociceptive (somatic or visceral), and neuropathic.
Nociceptive pain is the result of the normal processing of stimuli that damage or disturb tissues. Unlike neuropathic pain, nociceptive pain has an identifiable cause, either from musculoskeletal problems or from visceral ones. Pain is often localized over the level of lesion, but sometimes, in the incomplete lesion, it might be localized below the level.
Musculoskeletal pain can be caused either by injury at the time of lesion, or be related to overuse, and aging. Musculoskeletal pain is usually described as dull or aching and well-localized. It often worsens with activity, diminishes with rest, and responds to non-steroidal anti-inflammatory drugs (NSAIDs), cold and rest.
Visceral pain is often caused by undiagnosed gastrointestinal disease. Pain is usually poorly localized and can be associated with increased spasticity, overall discomfort, anorexia, nausea, fever, bloating, and changes in bowel habits.
Neuropathic pain results from the abnormal processing of sensory input due to damage to the peripheral or central nervous system. It may be difficult to identify a specific stimulus or cause of neuropathic pain, and it may be unresponsive to conventional methods of treatment.
Neuropathic pain is caused by nerve damage and it can be classified as peripheral and central. Peripheral neuropathic pain tends to be one-sided and is frequently described as shooting, burning, aching, or crushing. It can worsen with rest and improve with activity.
Central neuropathic pain is localized below and/or at the level of lesion and is commonly described as burning, tingling, shooting, stinging, stabbing, piercing, cutting, crushing, aching, and nagging. The pain is often diffuse and poorly localized and is more common when the cause of lesion is gun shot, when the lesion affect elderly people, when there is increased anxiety, and adverse psychosocial situations (depression), and may be exacerbated by fatigue, tobacco use, stress, overexertion, bowel or bladder complications, pressure sores, spasticity, and weather changes.
Onset of neuropathic pain is usually weeks to months after injury. The treatment of neuropathic pain may include the combination of drugs, physical therapy and psychological support. The assessment and treatment must be in charge to a multidisciplinary team, including doctors, nurses, physical therapists and psychologists.
Pain has important negative impacts on the quality of life of persons with SCI. The presence of pain is associated with poorer psychological functioning and social integration, and the intensity of pain interferes with a number of important basic activities of daily living.