Pain. 1988 Apr;33(1):87-107.
A peripheral mononeuropathy in rat that produces disorders of pain sensation like those seen in man.
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Source

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Abstract

A peripheral mononeuropathy was produced in adult rats by placing loosely constrictive ligatures around the common sciatic nerve. The postoperative behavior of these rats indicated that hyperalgesia, allodynia and, possibly, spontaneous pain (or dysesthesia) were produced. Hyperalgesic responses to noxious radiant heat were evident on the second postoperative day and lasted for over 2 months. Hyperalgesic responses to chemogenic pain were also present. The presence of allodynia was inferred from the nocifensive responses evoked by standing on an innocuous, chilled metal floor or by innocuous mechanical stimulation, and by the rats' persistence in holding the hind paw in a guarded position. The presence of spontaneous pain was suggested by a suppression of appetite and by the frequent occurrence of apparently spontaneous nocifensive responses. The affected hind paw was abnormally warm or cool in about one-third of the rats. About one-half of the rats developed grossly overgrown claws on the affected side. Experiments with this animal model may advance our understanding of the neural mechanisms of neuropathic pain disorders in humans.
Comment in

* Pain. 1990 Aug;42(2):253-5.

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