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Unraveling the mystery of pain in chronic pancreatitis

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Abstract

Chronic pancreatitis is typically a painful condition and it can be associated with a severe burden of disease. The pathogenesis of pain in this disorder is poorly understood and its treatment has been largely empirical, often consisting of surgical or other invasive methods, with an outcome that is variable and frequently unsatisfactory. Human and experimental studies have indicated a critical role for neuronal mechanisms that result in peripheral and central sensitization. The pancreatic nociceptor seems to be significantly affected in this condition, with increased excitability associated with downregulation of potassium currents. Some of the specific molecules implicated in this process include the vanilloid receptor, TRPV1, nerve growth factor, the protease activated receptor 2 and a variety of others that are discussed in this Review. Studies have also indicated novel therapeutic targets for this condition.

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