

Abstract

Pain is one of the five symptoms of inflammation. Activation and regulation of pain are affected both by the nervous system and the immune system. The production of inflammatory mediators decreases the threshold for activation of the ion channels of peripheral nociceptors, which then result in painful sensations caused by otherwise innocuous stimuli. Such mediators are cytokines, bradykinin, prostaglandins or various neurotrophic factors. This work aims to explain the function of immune cells in the production of these inflammatory and painful modulators. The study of activation and sensitization of nociceptors in inflammation is important for the understanding of the whole mechanism of inflammatory pain as well as for a comprehensive understanding of the neuroimmune system. Understanding inflammatory pain can lead to the development of specific drugs against it.

Key words: inflammation, pain, inflammatory pain, immune system, neuroimmune system