

Natureza do trabalho: Resumo

TÍTULO

TNF NEUROPATHIC PAIN'S CONTRIBUTION IN DEPRESSION

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RESUMO

Introduction: The immune system and the brain are important adaptive systems of the body and are connected to each other. TNF(tumor necrosis factor) play a role in immune and inflammatory diseases and several patients with neuropathic pain exhibited increased plasmatic TNF. Evidence has demonstrated that infectious and immunological factors may contribute to the pathogenesis of neurological and psychiatric disorders, and that TNF (tumor necrosis factor) play a role in the pathogenesis of depression. Patients suffering from neuropathic pain have a higher incidence of mood disorders such as depression. **Literature's Review:** Several neuropsychiatric disorders get intimate relationship with changing levels of inflammatory mediators. Much has been discovered about the role of an inflammatory mediator in particular - TNF - in the pathophysiological process of depression⁴. TNF plays a important role in the defense against different types of infectious agents, as well as autoimmune disorders and energy homeostasis. It is certain that the TNF is quimioatratorplay a role in inflammation and immune system acts as agent for macrophages, which chronically contributes to the perpetuation of neuropathic pain, inducing a depression. Certain cytokines such as interleukin (IL) -1, IL-6 and TNF and other cytokines itself acting on the brain through a route involving rapid transmission of primary afferent nerves that innervate the center of inflammation and a slow transmission path involving cytokines derived from choroid plexus and circumventricular organs and diffusing into the brain parenchyma. They and can change the activity of neurotransmitters and induce networks, for example, sleepiness, fatigue, reduced appetite and libido. These symptoms have been described as "sickness behavior" and are related to the behavioral changes in depression. **Conclusion:** The increased concentration of TNF is directly related to the development of neuropsychiatric disorders, such as depression. Thus, it is common for patients with chronic inflammatory diseases get depression.