

عنوان مقاله:

Updates on Novel Technologies in Pain Management

محل انتشار:

فصلنامه بین المللی پیشگیری از دردهای عضلانی اسکلتی، دوره 9، شماره 1 (سال: 1402)

تعداد صفحات اصل مقاله: 2

نویسندگان:

Saeed Pourhassan - Internal Medicine Department, School of Medicine, Tehran University of Medical Sciences, Tehran, Iran

Nastaran Maghbouli - Physical Medicine and Rehabilitation Department, School of Medicine, Tehran University of Medical Sciences, Tehran, Iran

خلاصه مقاله:

Chronic pain can cause limitations in mobility, daily activities, and sleeping disturbances leading to feelings of anxiety, depression, and isolation in addition to long-term disabilities in some cases. Chronic pain influence on person's physical and emotional well-being highlights needs for timely and effective pain management strategies. We discuss some new technologies in this subject to be updated. One new and novel strategy in pain management is the use of Virtual Reality (VR) technology. Recent studies have shown that VR can be an effective tool in managing pain by distracting patients and creating an immersive environment that helps to reduce their perception of pain. Patients can be transported to a virtual world where they can engage in activities that take their minds off their pain, such as walking on a beach or exploring a new city. Moreover, focus shifting and skill-building are other mechanisms introduced in literature. This nonpharmacological approach to pain management has shown promising results in various clinical settings such as fibromyalgia, trauma, postop pain, stroke, diabetes, multiple sclerosis and cancer. Although VR application in pain management is reasonable especially for children, future research is needed to find the most effective protocol of treatment and long-term benefits. Another innovative strategy in pain management is the use of biofeedback therapy. Bio feedback involves teaching patients how to control physiological processes in their bodies, such as heart rate and muscle tension, through monitoring and feedback mechanisms. Studies have shown that biofeedback can help patients to reduce their pain levels by learning to better regulate their responses to stress and pain triggers. This technique has been used in various chronic pain conditions, such as fibromyalgia, pelvic pain, low back pain and migraines, with positive outcomes. Furthermore, neurofeedback is a type of biofeedback focusing on the brain signals to control and improve activities. The source of signals can be Electro Encephalon Graphy (EEG) or functional Magnetic Resonance Imaging (fMRI). This intervention is mostly used in headaches with promising results.

کلمات کلیدی:

Pain, technology, management

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1952217>

