



**Medical
Blueprints**

VR FOR CHRONIC PAIN IS A GAME CHANGER REPORT #2808

BACKGROUND: Pain is a signal in your nervous system that something may be wrong and can be an unpleasant feeling, such as a prick, tingle, sting, burn, or ache. You may feel pain in one area of your body, or all over. Acute pain lets you know that you may be injured or have a problem you need to take care of, whereas chronic pain is different. Chronic pain may last for weeks, months, or even years, and the original cause may be caused by an injury or infection. There may also be an ongoing cause of pain, such as arthritis or cancer. Environmental and psychological factors can make chronic pain worse. Many older adults have chronic pain. Chronic pain is not always curable, but there are drug treatments, including pain relievers. There are also non-drug treatments, such as acupuncture, physical therapy, and sometimes surgery.

(Source: <https://medlineplus.gov/chronicpain.html>)

VR AS PAIN TREATMENT: A new study out of Cedars-Sinai Medical Center demonstrates the effectiveness of using virtual reality (VR) to combat pain for hospitalized patients. In the study, 120 adults were admitted for a variety of ailments including orthopedic problems, gastrointestinal diseases, and cancer. Half of the patients were given VR goggles with a variety of relaxing and meditative experiences to choose from and were advised to use the headsets three times a day for ten minutes per session over three days. The other half of the patients were instructed to tune their in-room TVs to the health and wellness channel, which included guided-relaxation content such as yoga and meditation, for the same amount of time. The study's findings showed the on-demand use of VR resulted in statistically significant improvements in pain compared to the TV group, with patients in the VR group averaging 1.7 points lower on the pain scale. "Virtual reality is a mind-body treatment that is based in real science," said Brennan Spiegel, MD, MSHS, director of Cedars-Sinai's Health Service Research. "It does more than just distract the mind from pain, but also helps to block pain signals from reaching the brain, offering a drug-free supplement to traditional pain management."

(Source: <https://www.cedars-sinai.org/newsroom/new-study-shows-value-of-virtual-reality-for-pain-management/>)

POTENTIAL TREATMENT FOR CHRONIC PAIN: Researchers from the University of Copenhagen have developed a new way to treat chronic pain with a compound that has been tested in mice. "It is a targeted treatment. That is, it does not affect the general neuronal signaling, but only affects the nerve changes that are caused by the disease," says co-author Kenneth Lindegaard Madsen, Associate Professor at the Department of Neuroscience, University of Copenhagen. The compound is a so-called peptide named Tat-P4-(C5)2. The peptide is targeted and only affects the nerve changes that pose a problem and cause the pain. The researchers hope that the compound may potentially help pain patients who have become addicted to opioid pain relievers, in particular. "The compound works very efficiently, and we do not see any side effects. We can administer this peptide and obtain complete pain relief in the mouse model we have used, without the lethargic effect that characterizes existing pain-relieving drugs," said Madsen. The researchers are currently working towards clinical trials in people.

(Source: <https://www.sciencedaily.com/releases/2020/04/200430113012.htm>)

✉ **For More Information, Contact:**

Jennifer Williams, Public Relations
jwilliams@919marketing.com

Free weekly e-mail on Medical Breakthroughs from Ivanhoe. To sign up: <http://www.ivanhoe.com/ftk>