The case of treatment of neuropathic and phantom pain with high frequency repetitive transcranial magnetic stimulation

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Introduction: neuropathic pain affects up to 8% of Europe's population, and phantom pain is experienced by up to 90% of patients who underwent amputation. In this study we show a case of woman with neuropathic and phantom pain. Materials and methods: 37-year-old Mrs. N., who suffered a leg injury, followed by amputation of the right lower leg and foot. Since the operation was 1 year. Mrs. N. complained of incredibly strong baking and "shooting" pain in her right knee, as well as pain and itching in the non-existent right heel, ankle. Mrs. N. was interviewed by the Leeds Assesment of Neuropathic Symptoms and Signs (LANSS), the Hamilton Rating Scale for Depression (HRDS), a visual analog scale (VAS). Therapeutic repeating TMS was performed by NEURO MS/D apparatus, an "8-coil" with a frequency of 10 Hz, an intensity of 90% of MT per area of the motor activity of the right leg, lasting up to 30 minutes for 20 days. RESULTS: Mrs N. assessed her pain by VAS as equal to 9-10 points. At the end of the treatment, the intensity of pain decreased by 5 points and 3 points three months after the last session. According to the LANSS, before treatment, the pain was equal to 17 points. Immediately after treatment - 10 points, after three months - 12 points. According to HRDS, the results were 24, 12 and 15 points respectively. Conclusion: We consider it expedient to use therapeutic rTMS for the treatment of patients with phantom and neuropathic pain.