

### 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.

# 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 Assessment 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 motor threshold 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.



#### CONCLUSIONS

This clinical case is presented as an example of treatment of both neuropathic (as proved earlier) and phantom pain in one patient. In this regard, we consider it expedient to conduct further studies of therapeutic rTMS for the treatment of patients with phantom and neuropathic pain.