SUMMARY OF COHERE RECOMMENDATION "Repetitive transcranial magnetic stimulation (rTMS) and transcranial direct current stimulation (tDCS) in the treatment of long-term nerve damage pain (neuropathic pain)"

At its meeting on 19 December 2024, the Council for Choices in Health Care in Finland (COHERE Finland) adopted a recommendation on repetitive transcranial magnetic stimulation (rTMS) and transcranial direct current stimulation (tDCS) in the treatment of long-term nerve damage pain (neuropathic pain).

‘The recommendation applies to adult patients suffering from long-term neuropathic pain. According to the recommendation:

a) Repetitive transcranial magnetic stimulation (rTMS) will not be included in the range of public health services for treating long-term neuropathic pain in adults.

b) Transcranial direct current stimulation (tDCS) will not be included in the range of public health services for treating long-term neuropathic pain in adults.

There is still insufficient research data on the effectiveness of rTMS and tDCS in treating long-term neuropathic pain in young or older people.

Long-term neuropathic pain (nerve damage pain) is a type of pain caused by nerve damage or malfunction. It is a severe condition that affects the patient’s quality of life in many ways, and significantly impairs functional capacity. It involves serious symptoms, of which the most important are electric shock-like pain, pricking or burning pain, muscle weakness and hypersensitivity to touch, and it can be very difficult to manage.

Approximately 6–10 per cent of the population suffer from neuropathic pain.

The Council for Choices in Health Care in Finland
PO BOX 33 (Meritullinkatu 8, Helsinki)
00023 GOVERNMENT, Finland
Tel 358 295 16001
www.palveluvalikoima.fi
palveluvalikoima.stm@gov.fi

The recommendation is aimed at public healthcare service organisers who arrange the treatment of patients with long-term neuropathic pain.

There is not yet sufficient research evidence of the effectiveness of repetitive transcranial magnetic stimulation (rTMS) in the treatment of long-term neuropathic pain in adults. High-frequency (10–20 Hz) rTMS over the motor cortex may reduce neuropathic pain in the short term, but so far there is not enough evidence of clinically meaningful long-term effectiveness. The evidence for the effectiveness of other methods of administration is clearly insufficient.

There was no research evidence for the effectiveness of transcranial direct current stimulation (tDCS) in treating adults with neuropathic pain when it comes to the methods of administration used in the studies, and the results between the studies were contradictory.

Assessing the effectiveness of both methods was challenging due to the inconsistency of the studies and to the lack of sufficient research evidence.

Based on the research evidence, no serious adverse effects are associated with the use of rTMS and tDCS in adults or young people when safety recommendations are followed.

The treatment period costs of rTMS depend on such factors as the number of therapy sessions and the costs of the treatment unit. The treatment period cost for one patient varies from a few thousand euros to over EUR 5,000, depending on the number of therapy sessions covered by the treatment period and on the length of the treatment.

The service organiser must ensure that the patients who suffer from long-term nerve damage pain are identified and provided with the proper treatment as early as possible in primary healthcare in order to prevent the condition from becoming chronic and more difficult to treat. People suffering from long-term neuropathic pain need treatment at pain clinics in specialised healthcare. The service system must ensure that effective treatment is available for these patients according to their individual needs and based on an individual treatment plan.

The Council for Choices in Health Care in Finland
PO BOX 33 (Meritullinkatu 8, Helsinki)
00023 GOVERNMENT, Finland
Tel 358 295 16001
www.palveluvalikoima.fi
e-mail: palveluvalikoima.stm@gov.fi

To ensure the fair distribution of resources, it is important to consider healthcare as a whole and how the resources allocated to pain treatment are divided into different stages of the treatment of long-term neuropathic pain within primary healthcare and specialised healthcare.

Neuromodulation treatments (incl. rTMS and tDCS) and device technology are developing rapidly. More research evidence is needed for the effectiveness of rTMS and tDCS as a third-line treatment option for patients with long-term neuropathic pain.

Aspects such as the information base for the recommendation and a description of the condition are shown in greater detail in the recommendation and its preparation memorandum (a separate document), together with a more detailed description of the methods covered by the recommendation and their effectiveness. In addition, a systematic literary review was commissioned to provide background material for the recommendation.

This is a summary of a recommendation adopted by the Council for Choices in Health Care in Finland (COHERE Finland). The actual recommendation and the related background material are available in Finnish on the website of COHERE Finland under Valmiit suositukset.

The summary of the recommendation is also available in Swedish and English on the website.

The Council for Choices in Health Care in Finland (COHERE Finland) works in conjunction with the Ministry of Social Affairs and Health, and its task is to issue recommendations on services that should be included in the range of public health services. Further information about service choices in healthcare is available on the COHERE Finland website.

Ministry of Social Affairs and Health

The Council for Choices in Health Care in Finland
PO BOX 33 (Meritullinkatu 8, Helsinki)
00023 GOVERNMENT, Finland
Tel 358 295 16001
www.palveluvalikoima.fi
e-mail: palveluvalikoima.stm@gov.fi