

IQWiG Reports - Commission No. E18-01

Pulsed electromagnetic fields for bone healing disorders – Addendum to Commission E17-08¹

Extract

¹ Translation of the executive summary of the addendum *Pulsierende elektromagnetische Felder bei Knochenheilungsstörungen – Addendum zum Auftrag E17-08* (Version 1.0; Status: 20 June 2018). Please note: This translation is provided as a service by IQWiG to English-language readers. However, solely the German original text is absolutely authoritative and legally binding.

20 June 2018

Publishing details

Publisher:

Institute for Quality and Efficiency in Health Care

Topic:

Pulsed electromagnetic fields for bone healing disorders – Addendum to Commission E17-08

Commissioning agency:

Federal Joint Committee

Commission awarded on:

12 March 2018

Internal Commission No.:

E18-01

Address of publisher:

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20 June 2018

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Keywords: Electric Stimulation Therapy, Fractures – Ununited, Fracture Healing, Assessment of Potential

20 June 2018

Executive summary

With its letter of 12 March 2018, the Federal Joint Committee (G-BA) commissioned the Institute for Quality and Efficiency in Health Care (IQWiG) with a supplementary assessment of commission E17-08 in order to evaluate the conclusions on the potential (in terms of §137e SGB V) of the pulsed electromagnetic fields (PEMF) method for bone healing disorders.

Research question

The aim of this examination was to determine for PEMF in bone healing disorders whether, besides the documents already used in the assessment of potential E17-08, further relevant studies or documents on relevant studies exist. If this was the case, it was to be evaluated whether, under their consideration, the present examination or treatment method still offers potential. Furthermore, it was to be evaluated whether, besides the studies already considered in the assessment of potential, there are any ongoing studies that in principle are suited to provide relevant findings on the benefit of the method in the near future.

Methods

Randomized controlled trials (RCTs) or documents on RCTs were included that investigated the PEMF method and had not already been used within the framework of the assessment of potential.

A systematic literature search for primary studies was conducted in the databases MEDLINE, Embase, and the Cochrane Central Register of Controlled Trials. At the same time, a search for relevant systematic reviews was conducted in the databases MEDLINE, Embase, the Cochrane Database of Systematic Reviews, and the HTA Database. The last search was conducted on 27 March 2018. In addition, systematic reviews and study registries were searched. The selection of relevant studies was performed by 2 reviewers independently of each other.

The assessment, synthesis and analysis of information followed the principles described in the Institute's General Methods.

Results

Information retrieval identified 1 additional document on a study already used in the assessment of potential, without further relevant information. There was no change in the evaluation regarding the potential of PEMF. No additional ongoing study was identified.

Conclusion

After a systematic evaluation, PEMF still possesses a potential in bone healing disorders. Beyond those studies already considered in the assessment of potential, no further completed or ongoing studies were found that in principle would be suited to provide evidence on the benefit of the method.

The full report (German version) is published under https://www.iqwig.de/en/projects-results/projects/non-drug-interventions/e18-01-pulsed-electromagnetic-fields-for-bone-healing-disorders-addendum-to-commission-e17-08.12660.html.