

Stop using ultrasound to speed up fracture healing, advise experts

February 21 2017

New evidence suggests that receiving low intensity pulsed ultrasound (LIPUS) to speed up bone healing after fracture has little or no impact on pain or recovery time, say a panel of international experts in *The BMJ* today.

They say LIPUS does not represent an efficient use of health resources and recommend that it should be stopped.

Their advice is part of *The BMJ's* 'Rapid Recommendations' initiative - to produce rapid and trustworthy guidance based on new [evidence](#) to help doctors make better decisions with their patients. Both the new evidence and the guidance are published by *The BMJ* today.

Every year around 4 in 100 people of all ages have a fracture - and up to 10% of these experience slow or complicated healing. As such, fractures have been a target for numerous interventions to aid recovery.

LIPUS was approved for [fracture healing](#) by the US Food and Drug Administration (FDA) in 1994 and is also supported by the UK National Institute for Health and Care Excellence (NICE).

Each device costs between US\$1300 and \$5000 and data suggest it is commonly used in clinical practice. But some studies have shown that the potential benefits of LIPUS on [bone healing](#) are highly uncertain.

So *The BMJ's* guideline panel - made up of bone surgeons,

physiotherapists, clinicians and patients with experience of fractures - carried out a detailed analysis of the latest evidence.

They judged, with moderate to high certainty, that LIPUS has little or no impact on time to return to work, time to full weight bearing, pain, the number of subsequent operations, or time to healing assessed with radiographs (known as radiographic healing).

As such, they unanimously recommend against LIPUS for patients with any [bone fractures](#) or osteotomy (the surgical cutting of a [bone](#) to allow realignment).

"We have moderate to high certainty of a lack of benefit for outcomes important to patients, and, combined with the high costs of treatment, LIPUS represents an inefficient use of limited healthcare resources," they write.

It is unlikely that new trials will alter the evidence, they add. And they suggest that future research "should focus on other interventions that have a greater probability to speed up [healing](#)."

More information: Low intensity pulsed ultrasound for bone healing: systematic review of randomized controlled trials, www.bmj.com/content/356/bmj.j656

Low intensity pulsed ultrasound (LIPUS) for bone healing: a clinical practice guideline, www.bmj.com/content/356/bmj.j576

Provided by British Medical Journal

Citation: Stop using ultrasound to speed up fracture healing, advise experts (2017, February 21)

retrieved 25 April 2024 from

<https://medicalxpress.com/news/2017-02-ultrasound-fracture-experts.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.