

# Effectiveness proven by studies

Duarte LR, Xavier CA, Choffie M (1966) Review of nonunions treated by pulsed low-intensity ultrasound. Int Soc Orthop Surg Traumatol 20th World Congress 111; PDS30, zitiert in Siska et al

Walsh et al, Effects of low-intensity pulsed ultrasound on tendon-bone healing in an intra-articular sheep knee model. The Journal of Arthroscopic and Related Surgery, Vol 23, No 2 (February), 2007: pp 197-204

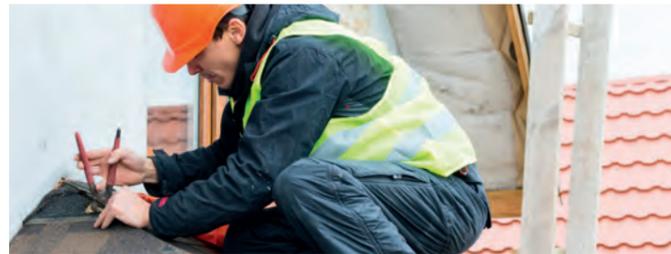
Siska et al, External adjuncts to enhance fracture healing: What is the role of ultrasound? Injury Journal. 2008 Oct.39 (10): pp 1095-1105

Pilla et al, Non-invasive low-intensity pulsed ultrasound accelerates bone healing in the rabbit. The Journal of Orthopaedic Trauma, Vol 4, No 3, 1990: pp 246-253

Walsh et al, Effect of Low Intensity Pulsed Ultrasound on Healing of an Ulna Defect Filled with a Bone Graft Substitute. Journal of Biomedical Materials Research Part B: Applied Biomaterials, 86B, 2008: pp 74-81

Busse et al, The effect of low-intensity pulsed ultrasound therapy on time to fracture healing: a meta-analysis. CMAJ. 2002 Feb 19;166(4): pp 437-441

**MELMAK** Especially suitable for professional groups with high strain



**Rehacare**

Tel 1300 653 522

(PO Box 71, Cherrybrook NSW 2126)  
email [sales@rehacare.com.au](mailto:sales@rehacare.com.au)  
[www.rehacare.com.au](http://www.rehacare.com.au)



Sources of supply & information:  
BTT Health GmbH  
Billberg 7  
82266 Inning am Ammersee  
Germany

**MELMAK** POWERED BY **btt**

BTT Health GmbH © 2017

Rehacare 201901 (Ref. BTT01-324 V1/201710)

# If it cracks ...



**MELMAK**  
Faster Fracture Healing

## MELMAK Ultrasound

The successful aid for healing bones. Get better, faster!

Painless  
No side effects  
Simple to use  
Clinically proven



# Selectively aid bone fracture healing with Melmak ultrasound

## Convincing benefits:

- Reduction in treatment and healing times
- Successful treatment especially in cases of pseudarthrosis, delayed healing and compound fractures
- Improved chances of healing for high-risk patients
- Painless application with or without plaster/cast
- Simple to use at home
- Large transducer for easier handling when mobility is limited
- Small transducer for fractures in smaller bones
- Best results for nearly 20 years
- Effect and mode of action scientifically proven
- No known risks or side effects



## Melmak application description 20 min.

The bone fracture treatment should start as soon as possible. Treatment lasting 20 minutes a day has proven to be ideal for the therapy.

### Flexible applications

Melmak offers two basic versions. The small transducer is particularly suitable for fractures in smaller bones (hands, feet or the shoulder area). It stays in position better and reduces the strain on the fracture point.

The large transducer is more suitable for all other fractures since it is easier to position and easier to handle when mobility is restricted.

### Cost

Insurance systems in Europe, Australia, USA and Canada, etc. have different rules about meeting the costs. High-risk patients and high-risk fractures, private and occupational accidents, fresh fractures and osteotomies - all of these are handled differently according to the country. Please contact your sales partner or our headquarters in Germany if you require further information.

Diverse ultrasound applications have been used in medical practice over the last few decades. Melmak works using ultrasonic waves with low intensity and high frequency (biomechanical effect). The aim is to build up bone substance and improve bone quality by increasing blood flow combined with pain relief.

Studies and testimonials have been proving for decades that bone fractures heal better using ultrasound treatment. These days it is regarded to be state of the art by doctors treating bone fractures or osteotomies as well.

No electromagnetic fields or currents are introduced into the body. The mode of action is based on a purely mechanical movement at cell level.

## Reduction in healing time by up to 41%

It can be expected that the healing time will be reduced on average by around one third (between 25% and 41% according to the case). Depending on the bone fracture or osteotomy, this means that the patient can expect to be fully fit again between three and six weeks sooner than without this additional treatment.

## Success with ultrasound therapy 90%

Pseudarthrosis or delayed bone fractures can be healed faster and better than previously. Therapy using Melmak is a painless alternative to operations that would otherwise be necessary - the success rate is around 90%.

## Which patients is the ultrasound therapy suitable for?

The Melmak therapy is suitable for all fracture patients who wish to get fit faster for their work or hobbies and for after-care following operations, e.g. hallux valgus.

The objective for high-risk patients with bone fractures is to get the healing process started in order to ensure rapid healing. A high risk of pseudarthrosis exists, for example, in the case of fracture patients with osteoporosis, diabetes, obesity, kidney disease, those on medication such as steroids or smokers.

Plates and screws inserted in operations are not a contra-indication.

