## HILOTHERAPY

The thermal procedure, controllable to the nearest degree





### WHAT IS HILOTHERAPY?

# HILOTHERAPY is a form of thermal healing treatment that promotes the healing process for damaged tissue.

Particularly after surgical operations, injuries and following chronic diseases and the resulting swelling, internal bleeding, hematomas, edema and inflammations, not only does it promote healing, it also reduces the intensity of pain, which can help dramatically reduce the quantity of drugs needed.

#### "I knew that already!"

Yes – you're right to say that applying cold treatment in itself is nothing new as part of treating rheumatic disorders. From ice packs, cool pads, cooling spray or cold air ... right up to the cold chamber solution, there are already a wealth of options. Some of which you may well have already used yourself. But what may be new and unfamiliar to you is this innovative and unique form of therapy, which is poles part from all other conventional alternatives: HILOTHERAPY.



#### What is HILOTHERAPY?

A form of thermal therapy that can be adjusted to the nearest degree over a spectrum from +15 to +22°C. Once configured, the temperature then remains constantly at the selected value – even when using the equipment for multiple hours.

Of course, there is always scope to adjust the temperature at any time, even during the treatment period, precisely to what feels best for you.

### How does this accurate-to-the-degree thermal method work?

So for example you may think: Between +15 and  $+22^{\circ}$ C? Isn't that unhelpful, because it's not cold enough?

Wrong – these temperatures can still be effective – and this is the crucial fact leveraged by the HILOTHERAPY method.

Here, instead of icy cold, which can also trigger negative side effects, you get a therapeutically positive lowering of the affected tissue temperature to the correct tailored individual value.

Maintaining a constant temperature is what makes the difference, and keeping this at 1 degree Celsius is precisely the secret behind HILOTHERAPY achieving its desired effect.



# +15°C to +22°C



#### The positive effects

The constant cold promotes the desired effects of HILOTHERAPY. The first step of which is blocking of pain receptors. The 'transmission' of pulses from the affected portions to the brain is interrupted and the sensation of pain is blocked.

A second effect: If the local tissue is cooled, this reduces blood flow and metabolism in the localized area concerned. Both these changes have the effect of relieving inflammation and swelling.

Moreover, they also boost lymph drainage and cytokine balance. Cytokines are messenger substances that play an important role in controlling the immune system.

An excess of pro-inflammatory cytokines and insufficient anti-inflammatory cytokines to offset them results in chronic inflammation. Disorders which involve this balance being disrupted include rheumatoid arthritis.

These effects clearly underline why cold therapy is expressly recommended by the Professional Association of German Rheumatologists.

#### Results of an observation study

An observational study performed at the Rheumatism Center in Oberammergau showed that pain intensity as measured by the test subjects using a visual 10-stage analog scale was reduced from 6 to 4 following the application of HILOTHERAPY (average value of all participants). In the most extreme case, the reduction in individual pain perceived went as low as 2, compared to the previous 7.



The need for painkillers was also reduced In 25% of cases. The upshot: fewer drugs, which can also often cause strong side effects.

The main diseases among the test subjects were rheumatoid arthritis, Sjögren's syndrome, psoriasis arthropathy, finger polyarthrosis, CRPS and fibromyalgia syndrome.

The average duration of treatment was 15 minutes and with an average cooling temperature of +15°C.



### HOW DOES HILOTHERAPY WORK?

The thermal effect is generated by the medium of water. It is adjusted to the desired temperature, accurate to the nearest degree, in special dedicated therapy devices and constantly maintained at this level.

#### The 'cold chamber' for at-home use

HILOTHERAPY is applied using the HILOTHERM Homecare device, which forms a closed-loop system together with cuffs and lines, through which the coolant flows.

The device is handy and also easily portable, weighing in at just 2.9 kg (empty weight). All you need is an electrical socket and some distilled water.

All of which means HILOTHERAPY can be applied with minimal advance notice, regardless of other dates.

#### Cuffs

Anatomically shaped cuffs are available for all relevant parts of the body.





Foot cuff







Hand cuff

Elbow cuff Shoulder cuff



#### Familiarize yourself with this new form of therapy!

But HILOTHERAPY is not a miracle cure. Moreover, not every person responds the same way to the use of cold applications.

However, it is a form of therapy capable of significantly alleviating discomfort, as has been verifiably demonstrated. Want to try it for yourself, just to be sure? Or are you keen to explore a new approach for financing?

No problem. We are happy to come up with a personalized quote for you, for a tailor-made solution.

Just feel free to ask. We recommend www.hilotherapy-bei-rheuma.de.

#### Advantages of HILOTHERAPY

- 1. Reduced pain intensity
- **2.** Reduction in painkiller dose, fewer side effects
- **3.** Can be used at any time, when acute attacks occur
- **4.** The temperature and duration of use can be adapted to suit individual sensitivities
- 5. Enhanced quality of life

#### Result of an observational study



Dr. Peter Keysser,
Head Doctor in the
Department for Rehabilitation,
Orthopedics and Rheumatology,
Oberammergau hospital,
Waldburg-Zeil Kliniken:

"After a track record of some years already treating post-op patients with great success, as well as other patients with inflammatory rheumatic systemic disorders in conservative therapy involving a system of cooling cuffs applied to large joints, we were then given the chance, as part of this initial observational study, to test prototypes of the new hand cuffs on our patients undergoing hand surgery as well as patients with rheumatoid arthritis as part of conservative therapy. Here too, the first results have been very promising. On average, after administering the treatments, the result was a pain reduction on the visual analog scale of 2 from a total of 10 points. 1/4 of the patients also attributed a reduced need for painkillers to the treatment. None of the applications led to any unwanted side effects or intensified pain, so we can unreservedly recommend the method used, both for our own rheumatic patients as well as for other patients facing orthopedic and traumatological issues."



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