Consensus statement
Recommendations for the use of extracorporeal shockwave technology in medical indications

Introduction

Building on the experience gained over the past 15 years, the scientific board of the ISMST and experts from National Shockwave Societies around the world, have put together a set of recommendations for the use of shockwave therapy.

Purposefully the experts did not apply Cochrane standards for the assessment of the level of evidence. The most recent meta-analyses published by Cochrane shows “platinum evidence” that shockwave treatment has little or no effect at all. But Cochrane researchers simply cannot ignore the results of several well-designed studies from the past which failed to show any efficacy of ESWT for various disorders. By analysing those studies it could be shown that inclusion criteria, treatment parameters or other conditions are afflicted with systemic biases which turn the results of the studies completely into the opposite. Therefore, as long as the situation is so incoherent the idea of a ranking due to the level of evidence is not reasonable or feasible.

Prerequisites

In order to prevent improper treatment the following are prerequisites for administering the technology:

In addition to a clinical examination, radiological imaging, neurological and/or laboratory-diagnostic tests may be necessary to corroborate the diagnosis. Only a qualified (certified by National or International Societies) physician may use shockwave therapy to treat pathologies, which have been determined by diagnostic testing.

For the treatment of bone ailments, a high-energy, focused shockwave with positioning technology is to be used. To treat superficial soft tissue conditions, devices with or without focusing technology may be utilized; close attention must
be paid to the depth of penetration of the shockwave source when treating deep tissue structures.

Approved standard indications

Chronic tendinopathies:

Plantar fasciitis with or without heel spur
Achilles tendon
Radial epicondylopathy (tennis elbow)
Rotator cuff with or without calcification
Patella tendon
Greater trochanteric pain syndrome

Impaired bone healing function:

Delayed bone healing
Stress fractures
Early stage of avascular bone necrosis (native X-ray without pathology)
Early stage osteochondritis dissecans (OD) post-skeletal maturity

Urology:

Lithotripsy (extracorporeal and endocorporeal)

Common empirically-tested clinical uses

Tendinopathy:

Ulnar epicondylopathy
Adductor syndrome
Pes anserinus syndrome
Peroneal tendon syndrome

Muscular pathologies:

Myofascial syndrome (fibromyalgia excluded)
Injury without discontinuity

Impaired wound healing

Burn injuries

Salivary stones

Exceptional indications/expert indications

Spasticity

Early stage osteochondritis dissecans (OD) pre-skeletal maturity
Apophysitis (Osgood Schlatter disease)

Peyronie's disease (IPP)

Uses under experimental conditions

Myocardial ischemia (extracorporeal/endocorporeal)

Peripheral nerve lesions

Abacterial prostatitis

Periodontal disease

Osteoarthritis

The authors group of the DIGEST

Vinzenz Auersperg
Matthias Buch
Ludger Gerdesmeyer
Markus Gleitz
Rolf Rädel
Jan-Dirk Rompe
Wolfgang Schaden
Richard Thiele
Andreas Waubke
Georg Wille

The ISMST Managing Board

Roland Hamisultane
Robert Gordon
Sergio Russo
Heinz Kuderna
Vinzenz Auersperg
Wolfgang Schaden
Richard Thiele
Richard Coombs

March, 10th, 2008

This statement has been voted for publication on the official website of the ISMST by the AGM (annual general meeting) of the ISMST. Juan les Pins, June 5th, 2008

_________________________________________________________________________