

Extracorporeal shock wave therapy  
**IN VETERINARY MEDICINE**

**STORZ** MEDICAL





## Shock wave therapy in veterinary medicine

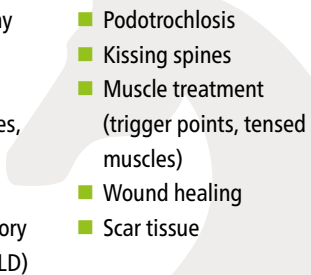
Extracorporeal shock wave therapy (ESWT) was first used for the treatment of orthopaedic disorders in the mid-1990s. Since then, it has become a standard procedure in pain therapy in humans, horses and small animals. Shock wave systems available in the market today use radial pressure waves or focused shock waves. Focused shock waves are ideal for the treatment of deep target areas, whereas pneumatically generated radial pressure waves are used for the treatment of superficial disorders.

### What are the effects of shock wave therapy?

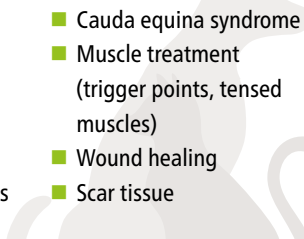
Shock waves have been demonstrated to produce antibacterial and anti-inflammatory effects. Additionally, growth factors have been found to increase in blood vessels, bones and connective tissue. As well as instant analgesic effects observed during the therapy, shock waves primarily have a long-term influence.

Generally speaking, it can be said that the biological effects induced by shock waves produce a time-shifted and sustained response inside the body. However, pain tolerance differs between horses and small animals, and they respond differently to shock wave therapy. As a consequence, accurate diagnostic examination and differential diagnosis are fundamental pillars of successful treatment.

#### Indications in horses

- Insertional desmopathy
  - Tendinopathy
  - Osteoarthritis
  - Fissures, stress fractures, osteolysis
  - Ligament injuries
  - Degenerative suspensory ligament desmitis (DSLSD)
  - Podotrochlosis
  - Kissing spines
  - Muscle treatment (trigger points, tensed muscles)
  - Wound healing
  - Scar tissue
- 

#### Indications in small animals, especially dogs

- Tendinopathy
  - Osteoarthritis (e.g. spondylarthritis)
  - Hip and elbow dysplasia
  - Fissures, stress fractures
  - Osteochondritis dissecans (OCD)
  - Cauda equina syndrome
  - Muscle treatment (trigger points, tensed muscles)
  - Wound healing
  - Scar tissue
- 

#### Advantages and benefits of ESWT

- Fast alleviation of pain or even complete pain relief
- Accelerated healing process
- No side effects
- No sedation or anaesthesia required
- Mobile application
- Outpatient treatment
- Reasonable and predictable costs
- No more than 3 to 5 treatments



## Shock wave applications in horses (examples)

Radial pressure wave therapy: tendinopathy



Radial pressure wave therapy: trigger point treatment



Focused shock wave therapy: osteoarthritis (bone spavin)



Focused shock wave therapy: kissing spines



Focused shock wave therapy: podotrochlosis



Focused shock wave therapy: osteolysis





## Shock wave applications in small animals (examples)

Radial pressure wave therapy: hip dysplasia



Radial pressure wave therapy: trigger point treatment



Focused shock wave therapy: cauda equina syndrome



Focused shock wave therapy: bicipital tendinitis



Focused shock wave therapy: knee osteoarthritis



Focused shock wave therapy: elbow dysplasia





STORZ MEDICAL

MP100 VET ultra

MASTERPULS



STORZ MEDICAL

2.6 bar  
400  
16 Hz



## MASTERPULS® MP100 VET »ultra« – Mobile radial pressure wave therapy

The MASTERPULS® MP100 VET »ultra« radial pressure wave system offers a range of benefits: compact size, excellent reliability, low servicing costs and an extremely silent built-in »Air Power« drive.

Plus unique ergonomic features: All essential controls (buttons and display) are located on the handpiece to ensure uninterrupted and fast handling and application without having to move away from the patient. The extra-long handpiece cable means that the system as such remains in the background. Treatment parameters developed by experienced therapists for all ESWT indications can be conveniently selected using the handpiece buttons. Alternatively, however, the system can be controlled via an optional touch screen.

»FALCON« radial handpiece



### Technical specifications – MASTERPULS® MP100 VET »ultra«

System weight: 10.5 kg

Extra-long handpiece cable (3.50 m)

Pressure: 0.3 – 5.0 bar<sub>eff</sub>

Frequency: 21 Hz

Optional vibration therapy with V-ACTOR® handpiece: 31 Hz

Optional control via 10" touch screen

Handpiece display



## Highlights

- Mobile use (carrying bag or case for transport)
- 1 minute set-up
- Effective and non-tiring handling without having to move away from the patient
- All controls (buttons and display) directly on the handpiece
- Therapeutic effectiveness up to 50 mm penetration depth
- Optional control via 10" touch screen

Carrying bag for transport





## DUOLITH® SD1 T-TOP VET »F-SW ultra« – Mobile focused shock wave therapy

With its high-quality workmanship and optimized ergonomics, the design of the new generation of focused shock wave systems with »SEPIA« handpiece is truly impressive. The long handpiece cable is particularly flexible, which ensures non-tiring handling and easier treatment without having to move away from the patient – a crucial benefit in daily practice.

### Technical specifications – DUOLITH® SD1 T-TOP VET »F-SW ultra«

System weight: 24.0 kg

Extra-long handpiece cable (2.55 m)

Energy: 0.01 – 0.35 mJ/mm<sup>2</sup>, cable length 2.55 m

Energy (optional): 0.01 – 0.55 mJ/mm<sup>2</sup>, cable length 1.60 m

Optional control via 10" touch screen

## Highlights

- Mobile use (carrying case for transport)
- Effective and non-tiring handling without having to move away from the patient
- All controls (buttons and display) directly on the handpiece
- Reduced revision costs thanks to easy change of coil
- Focal zone depth: 0 – 65 mm
- Therapeutic effectiveness: up to 125 mm penetration depth
- Exchangeable stand-offs for precise treatment

»SEPIA« focused handpiece with and without stand-off



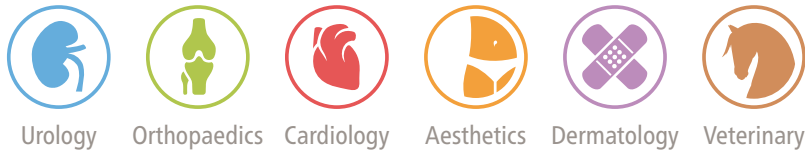
Handpiece display



Accessories case and carrying case for transport



HUMANE TECHNOLOGY – TECHNOLOGY FOR PEOPLE



Urology Orthopaedics Cardiology Aesthetics Dermatology Veterinary

**STORZ** MEDICAL

STORZ MEDICAL AG · Lohstampfstrasse 8 · 8274 Tägerwilen · Switzerland  
Tel. +41 (0)71 677 45 45 · Fax +41 (0)71 677 45 05 · [info@storzmedical.com](mailto:info@storzmedical.com) · [www.storzmedical.com](http://www.storzmedical.com)

Subject to change without notice. The information in this brochure is only intended for medical and healthcare professionals.  
This brochure provides information on products/indications that may not be available/relevant in all countries.

