Extracorporeal 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 (DSLD)
- 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)

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
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

### 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

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

- System weight: 10.5 kg
- Extra-long handpiece cable (3.50 m)
- Pressure: 0.3 – 5.0 bar
- Frequency: 21 Hz
- Optional vibration therapy with V-Actor® handpiece: 31 Hz
- Optional control via 10" touch screen

### Handpiece display

### 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.

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

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

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
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<tbody>
<tr>
<td>System weight</td>
<td>24.0 kg</td>
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<tr>
<td>Extra-long handpiece cable (2.55 m)</td>
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<tr>
<td>Energy (standard):</td>
<td>0.01 – 0.35 mJ/mm², cable length 2.55 m</td>
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<tr>
<td>Energy (optional):</td>
<td>0.01 – 0.55 mJ/mm², cable length 1.60 m</td>
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<tr>
<td>Optional control via 10&quot; touch screen</td>
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»SEPIA« focused handpiece with and without stand-off

Handpiece display

Accessories case and carrying case for transport