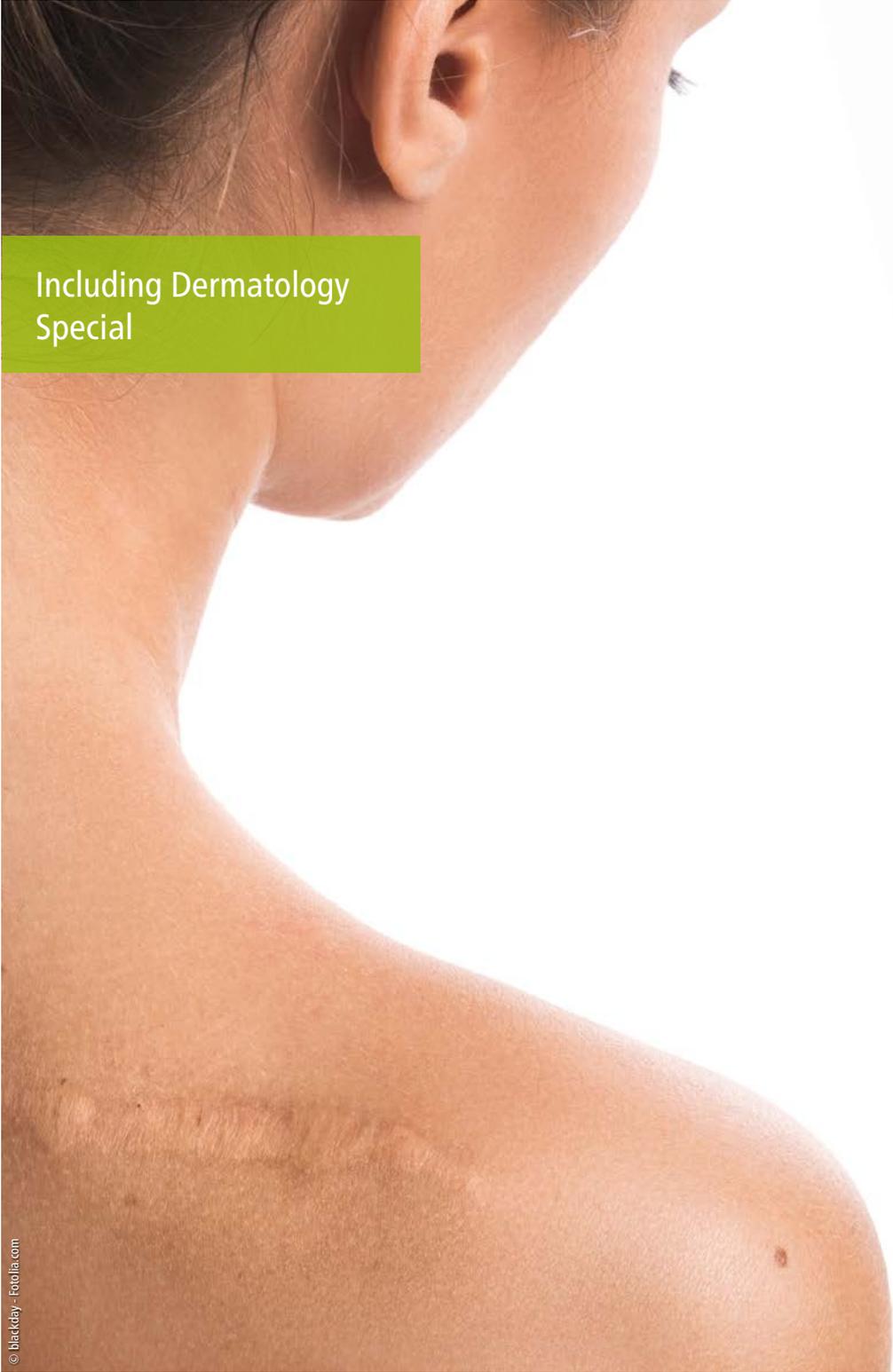




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# Shock Waves Today

The Journal for  
Shock Wave Users  
2/2018



Including Dermatology  
Special

30 Years of STORZ MEDICAL  
»It Remains Exciting«

Trends

**Shock Wave Therapy in  
Sports Medicine**

Shock Waves in Sports Medicine  
**Success Stories from  
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## 30 Years of STORZ MEDICAL »It Remains Exciting«



Even after 30 years, STORZ MEDICAL keeps pursuing new ideas so that they can offer compelling products.

Dear Reader,

I recently had an interesting conversation with a doctor while at an event. We were talking about shock wave therapy and the 30-year history of STORZ MEDICAL. The doctor told me what sets us apart and makes us successful from his point of view: »STORZ MEDICAL stands for innovation. You don't slow down to a standstill.«

Being innovative means continually questioning, changing and improving products and processes. It's about having visions, developing new ideas, believing in them and systematically implementing them. This is how we have been doing things at STORZ MEDICAL for 30 years. But it is also clear that innovations alone are not nearly enough for success. The commitment of employees and partners, good product quality, reliable service and also trusting customer re-

lationships that have frequently been nurtured over many years are just as important. In particular, in-depth exchange with users and the willingness to accept criticism have often helped us to improve things and solve problems.

Of course this raises the question whether there are still innovations in shock wave therapy after 30 years? I say yes, there are, and am absolutely convinced of this. On the one hand, we will make even better devices through continuous research. Furthermore, it is still our goal to develop this form of therapy further and to add new indications. The full potential of shock wave therapy is far from being exhausted, as demonstrated by the recent impressive achievements in neurology, for example.

30 years of STORZ MEDICAL – this anniversary makes us proud of our achievements. However,

at the same time we are looking to the future again. Because we really want to pursue new ideas and to offer you – our customers – convincing solutions. This pioneering spirit will determine our actions in the years to come. So it is still exciting for us, but above all for you as a shock wave therapy user.

Yours,

Dr Gerold Heine  
CEO

## Shock Wave Therapy in Sports Medicine



Radial treatment of medial tibial stress syndrome with the DUOLITH® SD1 »ultra«

Extracorporeal shock wave therapy (ESWT) has been used specifically for treatment of musculoskeletal disorders since the mid 1990s. Meanwhile, it has become established as an important treatment method in sports orthopaedics.

The first portable focused shock wave device, MINILITH® SL1, was already used in 1996 at



Focused shock wave treatment of an athlete, Olympic Games 1996 in Atlanta

the Olympic Games in Atlanta for conservative treatment of German athletes. Whereas osseous indications (delayed bone fracture healing, pseudarthrosis) were at the heart of focused shock wave therapy at the start, a whole range of other indications in sports orthopaedics gradually opened up (e.g. (insertional) tendinopathy, stress fractures, myofascial pain syndromes, and Osgood–Schlatter disease, calcaneal apophysitis).

Device technology has also developed greatly since then: focused shock wave therapy is combined with radial pressure wave therapy and complemented practically with add-on treatment options using vibration technology. Handling has also become more practicable: the devices are more compact, convenient and above all also easier to use. Thanks to numerous radial transmitters, a variety of tissues can be addressed optimally.

### Book »Shock Waves in Sports Medicine«



Prof. Dr Heinz Lohrer and Dr Tanja Nauck present the book »Shock Waves in Sports Medicine« from the »Shock Wave Therapy in Practice« book series at the 2018 VSOU congress in Baden-Baden, Germany.

Numerous studies published over the last few decades have proven the safety and efficacy of shock wave therapy for a variety of musculoskeletal disorders, also in athletes.

**Prof. Dr Heinz Lohrer**  
**Dr Tanja Nauck**

### At a Glance

- Use of ESWT in sports medicine since 1995
- Device technology has undergone huge development to date.
- Numerous studies prove the efficacy of this kind of therapy in sports medicine.
- You can find more information in the book »Shock Waves in Sports Medicine«, Level10 Publishing House, 2018, and also in the excerpts on page 5.

## Shock Waves in Sports Medicine: Success Stories from Around the World – Part 2

We already reported some outstanding success stories of extracorporeal shock wave therapy (ESWT) in sports medicine in our 01/2018 issue. We are continuing the series here – after all, we don't want to deprive you of anything.



**Oliver Pütz, Team Doctor of the German National Basketball Team, Cologne, Germany**

»As part of my role as Sports Orthopaedist, I use radial pressure wave and focused shock wave therapy not only to treat traditional indications, such as calcified shoulder or heel spur, but also as a complementary therapy, e.g. for myofascial pain syndrome or chronic tendinopathies. In particular, muscle and tendon disorders with a vertebral aetiology can be successfully treated by the combination of focused and radial ESWT.«



Oliver Pütz, Team Doctor of the German National Basketball Team



**Adj. Prof. Dr med. Florian Elser, Team Doctor of the National League Football Club FC Augsburg, Augsburg, Germany**

»My clinical work at the Hessingpark Clinic in Augsburg focuses on caring for amateur and professional athletes. At HPC, ESWT is part

of the conservative range of treatment in patient care. In addition to the traditional ESWT indications, I use shock waves specifically for acute sports injuries to the musculoskeletal system. Professional athletes, in particular, gain maximum benefit from the treatment as healing processes can be accelerated ensuring a faster return to sports.«



Adj. Prof. Dr med. Florian Elser, Team Doctor of the National League Football Club FC Augsburg



**Dr med. Christoph Seeger, Team Doctor of the National League Football Club Eintracht Frankfurt, Langen, Germany**

»We treat a lot of competitive athletes with ESWT. Here is a specific example: in my prac-



Dr med. Christoph Seeger, Team Doctor of the National League Football Club Eintracht Frankfurt

tice a 32-year old competitive athlete presented with pain in their heel that they had been suffering from for weeks, caused by plantar fasciitis with plantar heel spurs detected by radiography. In addition to physiotherapy, ESWT was performed using the DUOLITH® SD1 »ultra« device. A combination of focused shock waves and radial pressure waves was used 6 times in total. There was a significant improvement in the symptoms already after two weeks so that a return to team training was achieved.«



**Dr Chakarg Pongursorn, Team Doctor of the Thai National Gymnastics Team (SEA Games 2017), Thailand**

»During the preparation for the Southeast Asian Games (SEA Games) 2017 in Kuala Lumpur, Malaysia, ESWT played an important role in the medical care of the Thai National Gymnastics Team – both as sole therapy and in combination with other procedures. Of the many successful treatment examples I would like to highlight one of them: a 21-year old rhythmic gymnast had pain in her left hip, which was diagnosed as iliopsoas tendinitis. Radial ESWT was used with the maximum tolerated intensity (2,000 impulses per treatment, once a week). Cold compresses were used after the treatments and the training sessions were continued. The patient



Dr Chakarg Pongursorn, Team Doctor of the Thai National Gymnastics Team (SEA Games 2017)

was free of pain after three weeks and was able to perform her normal training exercises.«



**Sports Medicine Department of the most successful Slovenian Football Club, NK Maribor**

»A special recent success story is shock wave treatment of our player Kassim Doumbia. The 27-year old defender suffered a knee injury in training in March 2018. The diagnosis was a partial intra-articular ligament rupture. Our medical team opted for conservative treatment/rehabilitation. Doctors worked with focused, low-intensity shock waves to accelerate healing. As of June 2018, the player is training again, both by himself and with the team. For the preparation for the new season, he is fully recovered and back in training.«



The defender Kassim Doumbia was treated with focused shock waves.

The following contributions are excerpts from the book »Shock Waves in Sports Medicine« edited by Prof. Dr Heinz Lohrer and Dr Tanja Nauck. It was published in March 2018 by Level10 Publishing House. You can find more information on the publisher's website: [www.level-books.com](http://www.level-books.com)



**Jens Lundgren,  
Dr of Naprapathy,  
Stockholm, Sweden**

»I am always on the lookout for methods that enable a faster and safer return to training or competition. The positive effects of ESWT have been documented in the past for a wide range of chronic pain syndromes. But what about acute sports injuries? My colleagues and I examined this in a retrospective case study on eight patients with muscle injuries (4 x injury to the posterior thigh muscle/hamstring, 4 x injury to the medial gastrocnemius/»tennis leg«). Patients were treated between 5 – 7 times with a combination of focused shock waves and radial pressure waves. All patients in the hamstring group were able to resume their activities 6 weeks after the injury, while patients in the »tennis leg« group were able to resume their activities 4 to 10 weeks after the injury. At the follow-up after 3 months, no new injuries had occurred in either group. Due to the small number of cases no definite conclusions can be drawn, but the idea of ESWT treatment for acute muscle injuries should be discussed and explored further.«



Focused treatment of an injury to the medial gastrocnemius muscle

**At a Glance**

- Radial pressure waves and focused shock waves are not only used to treat traditional indications, but also as a complementary therapy for myofascial pain syndrome.
- ESWT is also used for acute sports injuries.
- From the point of view of some doctors, professional athletes benefit particularly as healing processes can be accelerated.



**Dr Nikos Malliaropoulos, Sports and Exercise Medicine Clinic, Thessaloniki, Greece**

»We recently investigated the effect of radial ESWT in the treatment of unilateral subacute and chronic hamstring muscle injuries in a retrospective study. The 37 patients, all athletes of various disciplines, were treated with customised radial ESWT. Compared to the baseline scores, pain scores were significantly reduced in all follow-up examinations, and the functional improvements were also significant.«



Radial treatment of a hamstring muscle injury

## Shock Waves in Podiatry From Musculoskeletal to Wound Healing



Treatment of a chronic wound at the Singapore Diabetic Foot Centre

Orchard Road is the iconic shopping district of Singapore. It is also here that one can find the Singapore Diabetic Foot Centre (SDFC), a world-class diabetic foot clinic established by the Podiatrists at East Coast Podiatry. Guided by the principles of combining podiatric medicine with

cutting-edge medical technology, East Coast Podiatrists believed that there was an alternative to how diabetic feet are being treated. The approach would be manifold - combining patient education with expert wound care using advanced medical technologies.

»Our practice has predominantly employed radial and focused shock waves as basic treatment modalities for our musculoskeletal injury cases. Focused ESWT works just as well for wound care. It's a powerful new tool in a wound care specialist's modern arsenal«, says Dr Michael Lai, principal podiatrist at SDFC.

»The demand for rapid wound healing has exponentially increased with health professionals around the world struggling to keep up with the enormous increase of diabetic wound cases. ESWT has been a proven success.« explains Senior Podiatrist Georgina Callaghan-Tay.

Focused shock waves initiate and support a wide spectrum of biological processes: Vascularisation is (re-)activated and new capillary vessels form (angiogenesis), inducing the production of stem cells and promoting growth factors (e.g. VEGF). This initiates and accelerates the wound's healing process, resulting in successful clinical results.

»We have patients from around the world who come to us for neuropathy (numbness or tingling sensation) in the legs or non-healing wounds. The key is education and awareness, especially for family members of patients who have diabetes, because it is usually them who would advocate and ensure timely treatments for their parents.« Senior Podiatrist Ari Tria Dzulrifle.

[www.singaporediabeticfootcentre.com.sg](http://www.singaporediabeticfootcentre.com.sg)

### New Book Recommendation

## »ESWT in Aesthetic Medicine, Burns & Dermatology«



»ESWT in Aesthetic Medicine, Burns & Dermatology« is the ninth volume of the successful »Shock Wave Therapy in Practice« series.

In July 2018 LEVEL10 Publishing House published »ESWT in Aesthetic Medicine, Burns & Dermatol-

ogy« by Prof. Dr med. Karsten Knobloch which is the ninth volume of the successful »Shock Wave Therapy in Practice« series. The book provides an up-to-date overview of the use of extracorporeal shock wave therapy (ESWT) in reconstructive surgery, burns surgery and aesthetic surgery.

The collected studies and contributions by well-known international shock wave experts cover a wide range of applications. Main topics include wound and scar treatment, accelerated wound healing in burns, the positive effect of ESWT in diabetic foot syndrome and the treatment of cellulite. Another chapter is devoted to lymphoedema. The editor, Prof. Dr med. Karsten Knobloch, is

a Specialist Physician for general, plastic and aesthetic surgery, hand surgery, sports medicine and emergency medicine. He is Acting President of the German-Speaking International Society for Extracorporeal Shock Wave Therapy (DIGEST).

#### At a Glance

##### »ESWT in Aesthetic Medicine, Burns & Dermatology«

- Editor: Prof. Dr med. Karsten Knobloch
- Publishing House: Level 10
- Price: € 59.00, pages: 248
- Language: English
- ISBN 978-3-945106-10-5
- Order from: [info@level-books.com](mailto:info@level-books.com)

## Practice Marketing Online Tips for Practices



Online marketing – an important tool for marketing a practice

A professionally designed practice website is still the first point of contact for a patient during their online research. This digital business card reflects the nature of the practice on the Internet. Therefore, it should be professional and state-of-the-art. A interested patient forms an opinion of the website within a few seconds. Therefore, it is important that the website can be found clearly and quickly and that it addresses the user personally and in a friendly manner.

The majority of interested patients access the Internet via mobile devices. The website needs to be responsive to give a good impression. Responsive means that the website also displays well on mobile devices and only needs a short time to load. This is required by Google. If a website is not responsive, it will no longer be displayed in future mobile search results.

To be successfully listed in search engines, content must be well structured and optimised for search engine technology (SEO). Each page should have a descriptive title and self-explanatory headings.

Frequently, you only see the term »Home« in start page titles. Search engines cannot handle this. Instead, the name and location of the practice should appear here. Of course, additional SEO actions and paid online advertising (Google AdWords) may be required to stand out from the competition. However, this is a very extensive subject and should be carried out by an agency.

You can implement the following yourself:

- Up-to-date entry in Google Business (online business directory from Google)
- Up-to-date Facebook page
- Monitor site visit statistics using Google Analytics

Another hot topic is the GDPR. The new European General Data Protection Regulation came into force on 25 May 2018. The background to this law is that unsolicited data may no longer be collected from users. There is a lot to consider here. For example, forms may only be sent in an encrypted manner and users must actively agree to collection of their data. Furthermore, the website

### Tip

STORZ MEDICAL provides a list of users offering shock wave therapy on its ESWT patient webpage. You can also register so that you can be found by new patients: [www.eswt.info](http://www.eswt.info)

must include a cookie reference and a privacy policy according to the GDPR. Not even half of all websites have been adapted yet, which is currently resulting in a wave of cease-and-desist letters. To avoid the unnecessary legal expenses of a warning notice, we recommend having a lawyer check the website.

### At a Glance

- Online marketing
- Modern website design
- Search engine optimisation
- GDPR (General Data Protection Regulation)

## 30 Years of Humane Technology – Technology for People Celebrate with Us at the Following Exhibitions and Conferences:

### November 2018

- **MEDICA 2018**  
12 – 15 November 2018  
Düsseldorf, Germany  
[www.medica.de](http://www.medica.de)
- **SHOCK WAVE Tashkent**  
17 November 2018  
Tashkent, Uzbekistan
- **Shock wave certification courses of the DIGEST: Module 1 (ESWT basic course, theory) & Module 3 (ESWT tendinopathies of the lower extremities)**  
30 November & 1 December 2018  
Vienna, Austria  
[www.digest-ev.de](http://www.digest-ev.de)

### December 2018

- **Zdravookhraneniye 2018**  
3 – 7 December 2018  
Moscow, Russia  
[www.zdravo-expo.ru/en](http://www.zdravo-expo.ru/en)

### January 2019

- **Arab Health 2019**  
28 – 31 January 2019  
Dubai, UAE  
[www.arabhealthonline.com](http://www.arabhealthonline.com)



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