

# SPARK OF LIFE®

Orchestrating Music of Healing with Shock Wave

Newsletter 2021/1

## Editorial



This newsletter is all about sport, fitness and health in times of the Corona pandemic. Unfortunately, an extraordinary time that kept sport facilities closed and sport activities limited to outdoor opportunities for quite some time. Under such movement restric-

tions, taking a walk with fresh air was always allowed - and the use of shock wave therapy certainly have a positive effect on the musculoskeletal system. This newsletter gives an insight into the success of Spark Wave Therapy in handling stress fractures and sore muscles. Various doctors confirmed this effectiveness from their daily work: orthogold100 helps with chronic pain and prevents orthopaedical malposition. Faster recovery from sports injuries made it possible to shorten the downtime and is thus an advantage in competitive sports.

We will also shed lights on the MTS' „sporting rules of the game“ and the philosophy and values behind it that made us a game changer in the industry. Whether big or small - we support local sports teams and international

professionals. For example, MTS sponsors a regional handball team in Konstanz and donated essential sport equipment. With the orthogold100, MTS also makes an important contribution to professional sports worldwide. In summary: MTS is setting new standards for modern sports medicine with this newsletter!

With our motto: The Spark of Life, we wish you an enjoyable reading and may it spark a sporting spirit in you.

Yours truly with Spark of Joy



Nikolaus Hopfenzitz,  
CEO MTS Medical

## Aim for Gold with orthogold100!



Picture: Rose Monday, third from left

Electrohydraulic Shock Wave Therapy is the therapy of choice for athletes in the major leagues. The NBA

champions Los Angeles Lakers, the NFL Pittsburgh Steelers, the MLB Chicago Cubs and US Olympic hopefuls routinely use ESWT - preventatively and therapeutically.

Rose Monday, head coach of the US Olympic women's track and field team said the orthogold100 is her „secret weapon“ for treating her athletes. Along with Dr. Carolyn Flanary, she is enthusiastic in treating Olympic hopefuls with electrohydraulic shock wave therapy.

orthogold100 is the preferred choice for clear reasons and there are exactly five points that lead to a great demand. Firstly: Spark Waves are free from side-effects. They do not cause any damage to healthy tissue and can be applied on an ambulatory basis. Secondly and thirdly: Shock wave therapy improves blood circulation and allows the inflammatory reactions in the affected tissue to subside. The accelerated healing process reduces the athlete's con-

„The most versatile and effective machine for musculoskeletal conditions“

A Success Story from NBA Professional Team Physician Dr. O' Malley in Sport Medicine with orthogold100.

Forced Break due to Sore Muscles?!

A pilot study at the University of Frankfurt investigated the relationship between shock-wave therapy and muscle soreness using orthogold100.

Sport and Exercise Medicine in Qatar with orthogold100®

Dr Aston Ngai, Sports and Exercise Medicine Specialist highlights the important role of orthogold100 as a vital part of the treatment for rapid recovery from sport injuries.

cerns about long periods of downtime. Fourth, it allows athletes to perform carefree training at the furthest possible physical limits.

And lastly, the patient can provide precise information during the Spark

Wave treatment - where the healing pain is most intense, that is where the effect is greatest and most efficient.

MTS agrees with Rose Monday's statement: orthogold100 is a „revolutionary technology that's absolutely

phenomenal. I am very thankful that we have it for our athletes“.

Orthogold100 is a revolutionary, phenomenal technology, optimal for the special demands of Olympic athletes.

## „The most versatile and effective machine for musculoskeletal conditions“ An NBA Professional Team Physician reports on His Successes

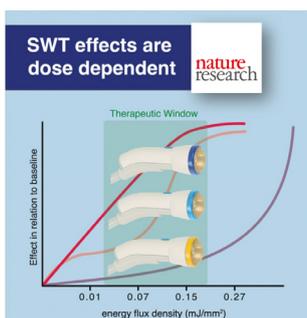


Dr. Martin O'Malley is a Team Physician for the NBA Brooklyn Nets, USA Basketball, Iona College Athletics and a consultant to the NY Giants. He is a surgeon at the Hospital for Special Surgery and he is also assistant professor of orthopedics at Weil/Cornell Medical School.

Many years ago, O'Malley had his first contact with shock wave therapy, which was previously unknown to him. His son suffered from delayed union tibia fracture and O'Malley was looking for alternative therapy methods. He decided on a MTS Spark Wave Device and the successful tibia healing with orthogold100 eventually became groundbreaking for his entire profes-

sional career. Since then, he made shockwave therapy as one of the standard treatments. After successfully treating over 100 professional athletes with orthogold100, O'Malley concludes in an open letter: „I urge you to look closely at the TRT machine with both focused and unfocused (SoftWave Technology) as I believe it is the most versatile and effective machine to treat a wide range of musculoskeletal conditions.“ O'Malley treats tendonitis, fractures and delayed bone healing, tendon injuries and wounds with ESWT – a therapy that has a proven track record of success in orthopedic indications and reliable in sports medicine.

## Art of Perfection: The Therapeutic Window of Spark Wave



Spark of Evidence: The energy range of all MTS Applicators performs excellent within the therapeutic range of regeneration. Jan/2021 publication on Nature Research recommends the energy range between 0.03 and 0.25 mJ/mm<sup>2</sup> for optimum angiogenesis – there could not be better evidence for the role of Spark Wave Technology in regenerative medicine!

Pözl, L., Nägele, F., Hirsch, J. et al. Defining a therapeutic range for regeneration of ischemic myocardium via shock waves. Sci Rep 11, 409 (2021)

## MTS supports Local Handball Youth Team

The girls of the HC DJK Konstanz Handball B-Youth Team received new sports equipment sponsored by MTS. With this new addition, Coach Tom Fohler commented: "It is a great appreciation for the girls, who invest a lot of time, energy, heart and soul in the sport." Apart from his coaching commitment Tom Fohler is a teacher trainee

at the University of Konstanz and he is also a student trainee in MTS' production department. MTS supports not only its employee, but also the sporting commitment in the region. The women's handball team has already recorded two victories in the district league with their new uniforms.



## Forced Break due to Sore Muscles?



Is muscle soreness treatable with shock wave? This is an important question in competitive sports. As we know, soreness reduces the time spent in training sessions and with it,

competitiveness and thus the career as a whole. A pilot study published in 2017 investigated the relationship between Spark Wave Therapy and muscle soreness at the University of Frankfurt using the orthogold100. Led by Johannes Fleckenstein, MD, a total of 64 participants were divided into three groups: a control group, a shockwave group, and a group treated with placebo shockwave therapy, in which 64 subjects participated in a 5-minute biceps training session. Measures included subjective but statistically evaluable pain reduction on a scale of 1 to 10 and sore muscle interference in daily living.

The results indicated that Spark Wave reduces the sensation of pain and decrease the sore muscle interference in everyday life. The differences are clearly visible after 72 hours. The result of this study is in line with many other scientific studies that confirmed the effectiveness of Spark Waves in the treatment of myofascial pain syndrome, for example.

Spark Wave Therapy thus seems to be beneficial not only in the therapy of stress inflammations and sports injuries. The effect of Spark Wave therapy may play an important role in the future in maintaining sports ability by down-regulating muscle soreness.



## Sport and Exercise Medicine in Qatar with orthogold100®



Dr Aston Ngai, a Sports and Exercise Medicine Specialist, currently practicing at Aspetar Hospital, has worked extensively in Asia with elite national and international athletes in racquet sports, field hockey, cycling, soccer, gymnastics, cycling, diving,

martial arts and basketball. For many years, Dr Ngai has been using orthogold100 in the rehabilitation of sports injuries and presented his experience at the ISMST Congress in Malaysia in 2016. He observed, that only 1.5 treatments (mean) were required with

orthogold100. This experience is shared by many international users that frequent repeat treatments, as known from other shock wave devices, is not necessary with the Spark Wave from MTS. In addition, the scientific evaluations showed that shock wave therapy worked better in athletes than for non-athletes. The patient perceived improvement and the pain sensation were evaluated. A similar response was found when treating most tissues, such as joints, muscles, tendons and bones. With only 1 to 2 treatments, orthogold100 was a vital part of the treatment to enable rapid return to sport. With this time-saving and non-invasive method, users can also meet the special challenges and needs of athletes.



### In Loving Memory of Dr. Silvia Ramon

It is with great sadness that we bid farewell to Dr Silvia Ramon. She was the medical director of the Department of Physical Medicine and the Department of Rehabilitation at Hospital Quiron Barcelona. For many years she worked for ISMST as a great medical research-

er and as an experienced Spark Wave expert. Her latest research focused on the use of orthogold100 in metatarsal stress fractures of professional soccer players.

Thank you for everything and we will always remember you.

## MTS Core Values



What are the values shared among the team at MTS Medical?

In an Agility & Value Workshop, the employees defined the values of

teamwork which are unique and feasible to themselves: In a nutshell, five key values are defined in keeping the world of MTS together at its heart: Communication, Respect, Flexibility, Structure and Creativity. Five values that provide a wide spectrum of dynamics in a team.

The primary focus is on communication: Being informed and being able to share. Language is the medium that connects us as a team, and allows us to accomplish our common goals. Different skills and talents that come from diverse cultures require first of all respect. Every employee has a different background, but in the right place within the company, this can result in a fruitful interaction. Different abilities and different opinions can quickly be experienced as a potential conflict. Mutual respect is the basis for not losing touch with the common goal.

As a company with many young bright minds and internationally diverse clients, flexibility is of essence. Structure is just as important as creativity: Only when creative ideas are channeled in an orderly manner they can achieve success guided in the right direction.

Respectful communication and the balance between flexibility, structure and creativity have made MTS a gamechanger and pioneer in medical technology. The unique MTS corporate culture was forged out of the dialogue between our employees: A balanced working atmosphere in an international environment. At MTS, we celebrate joy and success of our inclusive community and in the world of ESWT. It's not just a company but a lively melting pot which is constantly growing.

In a few words: It's a pleasure to work at MTS!

## MTS orthogold100® – Take Control and Change the Game!



Leading Shock Wave Innovations

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SPARK OF LIFE®  
NEWSLETTER ONLINE!**

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Die regelmäßige Zustellung

sichern Sie sich mit einer Nachricht an [info@mts-medical.com](mailto:info@mts-medical.com). MTS Medical entwickelt und produziert Spark-Wave-Therapiesysteme für Stoßwellenanwendungen in Orthopädie, Traumatologie, Wundheilung und Urologie – auch in Berei-

chen, die bis heute schwierig zu behandeln sind. MTS Medical ist einer der Pioniere auf dem Gebiet der nicht-invasiven Gewebeheilung und -regeneration.