

**Abstracts of the 11th International Congress of the ISMST
held in Juan les Pins France from 5th – 7th June 2008**

01 – How cavitation evolves during ESWT treatment.

Tom Matula, Jinfei Yu

02 – Extracorporeal Pulse Activation Therapy (EPAT).

Pavel Novak

03 – Shock wave therapy: What really matters.

Christoph Schmitz, Markus Maier

04 – Possible mechanism of mechano transduction induced by external stress like shockwave application.

Hans-Jürgen Duchstein, Kerstin Neumann, Helmut G. Neuland

05 – The development and state of the art treatment of ESWT.

Markus Maier, Christoph Schmitz

06 - Improving the effectiveness of shock wave therapy in plantar fasciitis: A comparative trial.

Gabriele Verratti, Miguel Angel Guedez, Myriam Capasso

07 - ESWT in plantar fasciitis – 7 years of experience with 2 different devices.

José Eid

08 - ESWT in the treatment of plantar fasciitis : report of 195 cases.

Roberto Audain, Raul Chirinos, Yarila Alvarez

09 – ESWT in Sever's Disease, an exceptionally good indication.

Roland Hamisultane

10 – The Effectiveness of Extracorporeal Shock Wave Therapy for Patients with Plantar Fasciitis who satisfy a Clinical Prediction Rule.

Mahmoud Ibrahim, Robert A. Donatelli, Madeleine Hellman, Frederick Buxbaum

11 – The effect of oral analgesics on pain tolerance during Extracorporeal Shock Wave Therapy (ESWT) for Chronic Plantar Fasciitis (CPF): A double-blind randomized placebo-controlled trial.

Bernard Fabio Meyer, Erno Thober, Mauro Meyer

12 – ESWT - large focus/low energy density versus small focus/high energy density using the same total energy delivered (mJ): evaluation of Results on calcific tendinitis of the shoulder.

Maria Cristina Ottone, Filippo Fagnani (bio-engineer)

13 – Effect of radial extracorporeal shock wave therapy for trochanter pain syndrome.

Antonio Morral, Mariano Fernández-Fairen

14 – ESWT in the treatment of epicondylitis: What results in medium- to long-term? (Efficacy only in the short term or also in the medium to long-term ?).

Maria Cristina Ottone, Rino Feltri

15 – Eccentric loading versus shock wave treatment for chronic insertional Achilles tendinopathy.

Jan-Dirk Rompe, John Furia, Nicola Maffulli

16 – High Energy Extracorporeal Shock Wave Therapy as a treatment for non-insertional Achilles tendinopathy.

John Patrick Furia

17 – Chronic Achilles tendon pain: tendon microcirculation and radial extracorporeal shock wave therapy (rESWT).

Antonio Ammendolia, T. Iona

18 – Eccentric loading, shock wave treatment, or a wait-and-see policy for tendinopathy of the main body of tendo Achillis.

Jan-Dirk Rompe, John Furia, Nicola Maffulli

19 – The influence of Mechanotransduction (ESW) on the reaction of membrane ion channels by means of patch clamp technique.

Helmut Garrelt Neuland, Andreas Lang

20 – Extracorporeal Shockwaves, Cell and Pain.

Andreas Lang, Helmut Neuland

21 – High Energy Shock Waves and 5-aminolevulinic acid: effects on a rat colon cancer cell line.

Loredana Serpe, Roberto Canaparo, Gian Paolo Zara, Pietro Tizzani, Marina Berta, Laura Berta, Roberto Frairia

22 – High energy shock waves (HESW) enhance 5-aminolevulinic acid and paclitaxel cytotoxicity in anaplastic thyroid cancer cells.

Maria Graziella Catalano, Laura Berta, Mariateresa Pugliese, Nicoletta Fortunati, Pietro Tizzani, Roberto Frairia

23 - New RSWT protocols validation in inflamed tendon.

Ivana Maria Belotti, Adren Nzeusseu Toukap

24 - Extracorporeal Shockwave for Chronic Tendinopathies – Data Analysis.

Ana Claudia Souza, Alexandra Schmidt, Flavia Arkader, João Batista Pereira, Mara Lui, Paulo Rockett, Paulo Roberto dos Santos

25 – The practicalities of the application of the complex enthesopathy theory in orthopaedics.

Viktor Vyacheslavovich Titov, Andrew Litvinenko

26 - Evaluation with ultrasound and color doppler of the results of ESWT for the control of hypervascular areas in non-insertional Achilles tendinosis. Power Doppler: new tool for ESWT.

Roland Hamisultane

27 – Ten-year results of high-energy extracorporeal shock wave therapy (electro-hydraulic) of tendinosis calcarea of the shoulder.

Rolf F. Rädcl, J. Wertenbruch, U. Dreisilker, G.Kievernagel, G.Schramm

28 - Falsities and false diagnosis in shock wave therapy.

Ulrich Dreisilker, Rolf Rädcl

29 – ESWT as an option when surgery fails.

Paulo Facciolla Kertzman, Jose Eid

30 – Flow analysis of out-patient activity: one-year report. Reflections on shock-wave therapy indications.

Paolo Buselli, Sara Messina

31 - Our experience using the Dornier Epos Ultra High Energy Protocol one year follow-up.

David H. Zuckerman, Denise Ashcraft

32 - Focused or Radial Shockwave Therapy ?

Nick Boden, Thomas Ong

33 – Avascular osteonecrosis in young patients: Long distance follow up of treatment with shock waves.

Sergio Russo, Emanuele Astarita, Umberto Russo, Vincenzo Scarpato, Clemente Servodio Iammarrone

34 – Extracorporeal Shockwave in Hip Necrosis: Are combined therapies more effective than ESWT alone ?

Ching-Jen Wang, Feng-Sheng Wang, Jih-Yang Ko, Hsuan-Ying Huang, Chung-Jen Chen, Yi-Chih Sun, Ya-Ju Yang

35 – Extracorporeal shock waves in Kienböck disease: Clinical experience and scientific speculations.

Maria Cristina d'Agostino, L. Marzella, M. Rubini, C. Bonora, A. Lazzerini, V. Sansone

36 - Twenty-one years ago the first patent was filed for treating bone pathologies using high energy shock waves.

Peter Marinov Mihaylov, V. Valchanov (died in 2001), Heriberto Bickman

37 – Our Experience with Shockwave Therapy.

Fernando Dujó Rodríguez

38 – ESWT in Delayed Union of the Ulna.

Dimitar Ivanov Raykov

39 - Delayed union and non-union in pediatric patients treated with ESWT.

Julian A. Brañes, D. Sepúlveda; L. Guiloff; M. Brañes

40 – Extracorporeal Shockwave Therapy for Non-Unions and Delayed Healing Fractures.

Andrea Valentin, A. Fischer, A. Menschik, N. Haffner, W. Schaden

41 – Shock Wave Treatment for Non-Unions - Verona Experience.

Claudio Tuto Maria Guerra, Ernesto Amélio

42 – The first experience of shock wave application in the treatment of chronic prostatitis.

Boris Garilevich, Anton Rotov

43 – Evaluation of the therapeutic efficacy of shock wave treatment in patients affected by rhizoarthrosis.

Sara Messina, Paolo Buselli

44 – Shockwave treatment for deep orthopaedic infections-an experimental model.

Mustafa Hafez, Coombs R, Petrou M, Hanna M, Maher S, Asopa V and Ramsay J.

45 – Shockwave treatment for aseptic loosening of prostheses.

Richard Coombs, Moustafa Hafez , Michael Petrou , Milad Hanna ,Maher Shah ,Vipen Asopa, Johnson Ramsay

46 – Efficacy and research of extracorporeal shock wave therapy in the treatment of main postural muscles (Comparison of MET and ESWT).

Ulrich Piontkowski, Silvia Sommer.

47 – Combined EPAT / Focussed Shock Wave Therapy and Trigger Points in Sports Medicine.

Ulrich Piontkowski, Silvia Sommer

48 – Requirements for research in ESWT management of spasticity.

Anna Michele Larking, Keith Andrews Susan Hall

49 – Radial extracorporeal shock wave therapy (rESWT) in the treatment of spasticity in cerebral palsy: a preliminary report.

Xavier Vidal, Antonio Morral, Anna Sanagustin, Anna Fornós

50 – Treatment of heterotopic ossifications using shockwaves: An in vitro study.

Michael Wei Chang, Adrienne Oda, Thanaphum Osathanon, Cecilia Giachelli

51 – Effect of ESWL on Osteochondritis Dissecans of the knee in a rabbit model.

Roger Lyon, XC. Liu, M. Kubin, *V. Osipov, J. Schwab, and J. Sizensky

52 - The importance of a standardized model for shock wave in-vitro trials - a proposal plus preliminary results of cardiac cells.

Johannes Holfeld, Barbara Kapeller, Julia Dumfarth, Daniel Zimpfer, Reiner Schultheiss, Robert Goeschl, Udo Losert, Wolfgang Schaden, Michael Grimm, Karin Macfelda

53 - ESWT down regulates the pathologic mechanisms causing cartilage damage in osteoarthritis.

Biagio Moretti, Angela Notarnicola, Florenzo Iannone, Lorenzo Moretti, Vittorio Patella

54 - Osteoblast repair action induced by ESWT.

Biagio Moretti, Angela Notarnicola, Roberto Tamma, Alberta Zallone, Angelo Di Giovanni, Vittorio Patella

55 - Focused Extracorporeal Shock Waves Influence Migration, Proliferation and Growth of Human Mesenchymal Stem Cells.

Helmut Garrelt Neuland, Yvonne Delhasse, Hans-Jürgen Duchstein, Annette Schmidt, Wilhelm Bloch

56 - Comparative study between the effects and mode of application of focused and radial shock wave treatment on the behaviour of human mesenchymal stem cells (MSC).

Yvonne Delhasse, Helmut Neuland, Caroline Steingen, Annette Schmidt, Wilhelm Bloch

57 - Shockwave therapy on human fat-derived stem cells.

Tatjana J. Morton, Joachim Hartinger, Eva Tögel, Anja Peterbauer, Wolfgang Schaden, Martijn van Griensven

58 – The effect of ESWT on matrix structure, tenocyte metabolism and gene expression in non-injured tendinous structures.

Gerco Bosch, Marieke de Mos, Hans van Schie, Chris van de Lest, René van Weeren

59 - Surface-Enhanced Raman Scattering (SERS) as a new tool for the study of Tendinopathic Human Rotator Cuff.

José Cárcamo, E. Clavijo, PhD; M. Campos-Valette, M. Brañes; L. Guiloff; H.Contreras; J. Brañes; R. Aroca

60 – Biomechanical Testing of Spinal Fusion Segments Enhanced by Extracorporeal Shock Wave Treatment: A Rabbit Experiment.

Tao-Chen Lee, Ching-Jen Wang

61 – Treatment of Heart Failure with Physical Methods.

Johannes Mueller, Karin Macfelda

62 – Epicardial Shock Wave Therapy Induces Neoangiogenesis and Improves Left Ventricular Function After Myocardial Infarction in Pigs in Vivo.

Johannes Holfeld, Daniel Zimpfer, Julia Dumfarth, Seyedhossein Aharinejad, Raphael Rosenhek, Anita Thomas, Udo Losert, Margit Vögele Kadletz, Wolfgang Schaden, Ernst Wolner, Michael Grimm

63 – Direct epicardial shock wave therapy improves left ventricular function in an experimental model of ischemic heart failure.

Daniel Zimpfer, Johannes Holfeld, Julia Dumfarth, Seyedhossein Aharinejad, Raphael Rosenhek, Anita Thomas, Udo Losert, Margit Vögele Kadletz, Wolfgang Schaden, Ernst Wolner, Michael Grimm

64 – How many shockwaves are enough? Dose-response relationship in ischemic challenged tissue.

Rainer Mittermayr, J. Hartinger, M. Hofmann, F. Krammel, M. van Griensven, W. Schaden, H. Redl

65 – Pulsed Acoustic Cellular Technology Protecting Microcirculation due to Neovascularization and Wound Healing in Ischemic Muscle Flap Model.

Lukasz Krokowicz, Aleksandra Klimczak, Mariusz Mielniczuk, Christopher Grykien, Maria Siemionow

66 – Radial extracorporeal shock wave therapy (rESWT) in wound healing – a prospective randomized Placebo-controlled animal trial.

Ludger Gerdesmeyer, Hans Gollwitzer, Rainer Mittermayr

67 – Shock wave Therapy in peripheral nerve repair: Investigation in a rat sciatic nerve repair model.

Gabriel Halat, H. Redl, T. Hausner, S. Zandieh, R. Hopf, W. Schaden, R. Schmidhammer

68 – Effects of extracorporeal shock waves on skin fibrosis and on biomarkers of patients with Progressive Systemic Sclerosis.

Ernesto Amelio, Claudio Guerra, Elisa Tinazzi, Elettra Marangoni, Cláudio Lunardi

69 – ESWT in Chronic Decubitus Ulceration in Complex Neurological Disability.

Anna Michele Larking, Keith Andrews, Mary Hardy

70 – Shock wave therapy to improve wound healing after vein harvesting for CABG.

Julia Dumfarth, Daniel Zimpfer, Johannes Holfeld, Florian Sihorsch, Wolfgang Schaden*, Margit Voegele Kadletz, Ernst Wolner, Michael Grimm

71 – Clinical Experience with ESWT in Sub Acute and Chronic Wounds.

Rainer Mittermayr, Ch. Köpl, M. Pusch, W. Schaden

72 – ESWT to improve the outcome of complex non-healing leg and foot ulcers.

Dieter Oscar Mayer, Devdas T. Inderbitzin, Zoran Rancic, Michele Genoni, Mario Lachat

73 – Accelerated Healing of IIa-Burns Under the Influence of ESWT.

Christian Ottomann, Sergej. Marx, Richard Thiele, Bernd Hartmann

74 – ESWT-induced healing of diabetic foot ulcers.

Biagio Moretti, Angela Notarnicola, Giulio Maggio, Silvio Patella, Paolo Foscarini, Vittorio Patella

75 – Blood flow perfusion and molecular response after ESWT in chronic skin ulcers.

Ching-Jen Wang, Re-Wen Wu, Chi-Shiung Hsu, Yur-Ren Kuo, Rue-Tsuan Liu, Feng-Sheng Wang