

01 - Shock and Pressure Waves - Magic Tools in Medicine

O. Wess

02 - Shock Wave Energy Deflection due to the Presence of a Model Bone

T. J. Matula, J. Tu, K. Fagnan, M. R. Bailey, and R. LeVeque

03 - Extracorporeal Shockwaves Manifest Themselves as Biological Mechanotransduction

H.G.Neuland, H.J.Duchstein

04 - A Trial on the Mechanotransductional Influence of ESWT on Pig Skin and Fibroblastic Activity under the Aspect of Energy Flux Density and Frequency

S. Marx(1), H.G.Neuland(2), H.J.Duchstein(3), R.Thiele(1)

05 - Nitric Oxide and Shock Waves: Another Brick in the Wall

E. Amelio

06 - Biological Mechanism of Shockwave in Fracture Healing

Ching-Jen Wang, M.D.

07 - Radial Extracorporeal Shock Wave Therapy (rESWT) Induces Bone Formation in Vivo

L. Gerdesmeyer, H. Gollwitzer, P. Diehl

08 - Influence of ESWT on Migration, Cell-Formation and Cell-Differentiation of Endothelial Progenitor-Cells

S. Marx(1); H. G. Neuland(2), W. Bloch(3)

09 - The Effect of Focused Extracorporeal Shockwaves on Migration Activity of Mesenchymal Stem Cells (MSCs) Ex-vivo.

H.G. Neuland, A. Schmidt

10 - Stem cell De-Programmation by Shockwaves

S. Russo; B. Corrado; M. Tullio; E. Astarita; E.M. Corrado F. Di Meglio(\*); D. Nurzynska(\*); S. Montagnani(\*); A. Arcucci(\*)

11 - Orthopaedic Lithotripsy in Chronic Tendinopathies

J. Vallejo Ponce, E. Berumen Nafarrate, J.A. Nunez Valdez, A. Aguirre Madrid

12 - Therapy with Radial ESWT Combined with Physiotherapy in the Treatment of Soft Tissue Diseases

Skordis D. PH\*\*, Papaioannou N. MD\*, Macheras St. MD\*\*\*, Karalis Th. PH\*\*, Dekoumes E. PH\*\*, Tsalkitzi M. PH\*\*.

13 - Sport's Injuries of Tendons: our Experience with ESWT with Ultrasound Guide in Line

R. Conti\*, E. Ciortan, U. De Joannon

14 - Shockwave Biosurgery in Insertional Tendinopathies: Our Experience in Ecuador

E. Santos, A. Galarza

15 - Radial Shock Wave Therapy (RSWT) for the Treatment of Chronic Tendonopathies - our Experience

J. Crupnik

16 - Shockwave Therapy for Achilles Tendonopathy : Retrospective Study

**Paulo Roberto Pires Rockett, Ana Claudia de Souza, Flavia Arkader**

17 - Efficacy of Extracorporeal Shockwave Therapy (ESWT) in the Treatment of Tendinopathies and Enthesiopathies

B. Tan K.K. Chia R. Tian

18 - Beginning of Analgesia as a Key Variable in Shockwave Biosurgery

R. Audain, R. Chirinos, Y. Alvarez

19 - Why are Extracorporeal Shock Waves the Last Alternative Therapy?

O. Patiño

- 20 - Evaluation with Ultrasound and Color Doppler of the Results of Extracorporeal Shock Wave Therapy for the Control of Hyper Vascular Areas in Tendinosis (Preliminary Study)  
R. Hamisultane
- 21 - Treatment of Chronic Lumbar Pain with Radial Shock Waves  
P. Kertzman, J. E. Fukugawa
- 22 - Morton`s Neuroma: Treatment with Extracorporeal Shock Wave Therapy  
B.F. Meyer, M. Meyer, E. Thober
- 23 - Focused Shock Waves in the Treatment of the Sesamoiditis of the Hallux  
R. Audain, R. Chirinos, Y. Alvarez
- 24 - Radial Shockwave Therapy for the Treatment of Rotator Cuff Rupture and Pericapsulitis: A Case Report  
L. Hernandez
- 25 - Clinical Investigation into the Effects of Extracorporeal Shock Waves on Skeletal Muscle Dysfunctions in Patients Affected by Cerebral Palsy  
B. Corrado, S. Russo, S. Gigliotti, C. S. Iammarrone, E. M. Corrado
- 26 - Shockwave Biosurgery and Autologous Growth Factors Combined Therapy in Equine Suspensory Ligament Injuries  
C. Leal, S. Hernandez, M. Umana, M. Cortes
- 27 - Duration of Analgesia Resulting from Extracorporeal Shockwave Therapy in Unilateral Lameness in Horses  
S. McClure, J. A. Dahlberg, R. B. Evans
- 28 - ESWT Treatment in Delayed Union and Pseudoarthrosis  
D. Rozzati, A. Littera , S. Festari , G. Sessa , A. Carriero
- 29 - Shockwave Biosurgery and Autologous Growth Factors Combined Therapy in Minimally Invasive Treatment of an Intertrochanteric Fracture Non-union: a Case Report  
J.C. Lopez, C. Leal, O.E. Reyes, J.M. Herrera, M. Cortes
- 30 - The Effects of Extracorporeal Shockwaves on Acute High-Energy Long Bone Fractures of the Lower Extremity  
Ching-Jen Wang, Hao-Chen Liu, Te-Hu Fu
- 31 - Standard of Care for the Treatment of Non-Unions  
J. Hungria Neto
- 32 - Extracorporeal Shockwave Therapy for Non-Unions and Delayed Healing Fractures  
W. Schaden, A. Fischer, A. Sailler, A. Menschik, N. Haffner
- 33 - Standard of Care for the Treatment of Avascular Necrosis (AVN) of the Femoral Head  
Dr. João Matheus Guimarães
- 34 - Treatment for Osteonecrosis of the Femoral Head: Comparison of Extracorporeal Shock Waves with Core Decompression and Bone-Grafting  
Ching-Jen Wang, MD, Feng-Sheng Wang, PhD, Chung-Cheng Huang, MD, Kuender D. Yang, MD, PhD, Lin-Hsiu Weng, MD, and Hsuan-Ying Huang, MD
- 35 - New Application of Shock Waves in Arthritis and other Osteochondropathies: Clinical Data, Biological Considerations and Future Perspectives  
M.C. d`Agostino, V. Sansone, M. De Donato, B. Boniforti, R. Venturini.
- 36 - Osteochondral Lesions as an Indication for ESWT  
R. Thiele, S. Marx

37 - Effectiveness of Shock Waves in Bone Marrow Edema Syndrome of the Hip: new Cases and More Pathogenetic Hypothesis

M. C. d'Agostino, B. Corrado(\*), S. Russo (\*), S. Gigliotti (\*), V. Sansone, B. Boniforti.

38 - Two-Year Results of Patients with Gonarthrosis Treated with Intermittent Extracorporeal Shockwaves and Intra-Articular Application of Hyaluronic Acid

A. Lang, H.G. Neuland

39 - Histological Findings in Human Osteoarthritis (OA) Treated with ESWT

M. Branes, L. Contreras, L. Guiloff, J.A. Branes

40 - Standard of Care for Lateral Epicondylitis

M. Campos

41 - Shockwave Therapy for Lateral Epicondylitis of the Elbow : Retrospective Study

**Ana Claudia de Souza, Paulo Roberto Pires Rockett, Paulo Roberto Pires dos Santos**

42 - Radial or Focused Shockwave Biosurgery In Lateral Epicondylitis?

C. Leal, J.C. Lopez, J.M. Herrera, O.E. Reyes, M. Cortes

43 - Recommendation for the Treatment of Tennis Elbow with ESWT

D. Steeger von Keitz, F. von Keitz and A. Löwe

44 - Extracorporeal Shockwave Therapy for Lateral Epicondylitis of the Humerus

Vinzenz Auersperg

45 - Pain in the Medial Calcaneal Tuberosity – Summary

C.A. Jasmin

46 - Shockwave Therapy for Plantar Fasciitis : Retrospective Study

**Paulo Roberto Pires Rockett, Ana Claudia de Souza, Paulo Roberto dos Santos, Flavia Arkader,**

47 - The Application of Piezoelectrically Generated Shock Waves at a 6 Hz Frequency for the Treatment of Plantar Fasciitis

M.C. Ottone, S.R. Ferraro

48 - Extracorporeal Shockwave Therapy for the Treatment of Plantar Fasciitis - Comparative Study of Focused ESWT Versus Combined Focused and Radial ESWT

G. Verratti

49 - A Two Year Retrospective Review of the Effectiveness of Extracorporeal Shockwave Therapy for the Treatment of Chronic Plantar Fasciitis

1. K. Eickmeier, 2. B. Werber, 3. D. Norris, 4. D. Boryana

50 - Long-term Results of Extracorporeal Shockwave Treatment for Plantar Fasciitis

Ching-Jen Wang, \*Feng-Sheng Wang, \*Kuender D. Yang, Lin-Hsiu Weng, Jih-Yang Ko

51 - Plantar Fasciitis – Conservative & Surgical Therapy – Radial and Focused ESWT – Review of the Literature

M. Buch

52 - Standard of Care for Stress Fractures

**Prof. Dr. Moises Cohen**

53 - Shockwave Biosurgery for Stress Fractures

C. Leal

54 - ESWT Treatment in Calcific Tendinitis of the Shoulder

D. Rozzati, A. Littera, E. Cignini, S. Festari, G. Sessa, A. Carriero

55 - Shockwave Therapy for Tendinosis of the Shoulder: Retrospective Study

**Ana Claudia de Souza, Paulo Roberto Pires Rockett, Mara Bernadete Lui**

- 56 - Extracorporeal Shock Wave Therapy (ESWT) for Treatment of Calcific Tendonitis of the Shoulder One-Year Experience  
Capasso T. M, Gonzalez C. O, Guedez M.
- 57 - Shockwave Therapy for Tendinosis Calcarea of the Shoulder : Retrospective Study  
**Paulo Roberto Pires Rockett, Ana Claudia de Souza, Paulo Roberto Dias dos Santos**
- 58 - Economic Aspects in the Treatment of Tendinosis Calcarea of the Shoulder  
J. Eid
- 59 - Shoulder Tendinosis and Related Clinical Entities Treated with ESWT. Histopathological and Clinical Correlation  
M. Branes, L. Contreras , L. Guiloff , J.A. Branes
- 60 - The Effectiveness of Extracorporeal Shock Wave Therapy on Tendinitis of the Shoulder  
L. Gerdesmeyer, S. Wagenpfeil, G. Handle, M. Loew, K. Lehmkuhler, S.Gassel, R. Seil
- 61 - Effectiveness of Transcutaneous Electrical Nerve Stimulation on Relieving Pain During Radial Extracorporeal Shock Wave Therapy, in Tennis Elbow  
Morral A., Fernandez P., Costa L., Bretones J.C.
- 62 - Shockwave Therapy for Hip Bursitis: Retrospective Study  
**Ana Claudia de Souza, Paulo Roberto Pires Rockett, Flavia Arcader**
- 63 - Shockwave Biosurgery and Autologous Growth Factors Combined Therapy in Severe Patellar Tendinopathies  
C. Leal, J.C. Lopez, J.M. Herrera, O.E. Reyes, M. Cortes
- 64 - Treatment of Jumper's Knee with Extracorporeal Shock Wave Therapy  
M.C. Vulpiani, D. Trischitta, M. Vetrano, V. Savoia, E.Di Pangrazio, A. Ferretti
- 65 - Post Traumatic Reduction of the Range of Motion and Impairment of the Athletic Gesture – Therapeutic Potential of Shock Waves  
P. Buselli
- 66 - ESWT in La Peyronie's Disease : Experience of Therapy with Equipment with US Guide in Line  
R. Conti\*, E. Ciortan, U. De Joannon.
- 67 - Shock Waves After Severe Hand Traumas: Description of a "Trophic Effect" on Bone and Soft Tissue  
M.C.d´Agostino, A. Lazzerini
- 68 - Shockwave Therapy for Peyronie's Disease - Comparison of Outcomes for Acute (Inflammatory) Versus the Stable Disease States  
D. Manzone
- 69 - ESWT: a Tool Against Neurogenic Inflammation in "Pillar Pain" Disease  
M.C. d´Agostino, A. Lazzerini, E. Tibalt.
- 70 - Localized Calcifications in a Patient with Limited Scleroderma, Treated with ESWT - Case Report  
C.Tedeschi\*\*, D. Bianchini\*\*, G. Bajocchi\*\*\*; R. Zoboli\*
- 71 - Extracorporeal Shockwave Therapy for Chronic Skin Lesions: Cases Reports  
**Paulo Roberto Dias dos Santos; Ana Claudia de Souza; Paulo Roberto Pires Rockett; Marco Guedes**
- 72 - Extracorporeal Shockwave Therapy for Chronic Skin Lesions – Preliminary Report  
W. Schaden, C. Köpl, A. Valentin, M. Pusch, R. Thiele\*, H. Vasconez\*\*, M. J. Novak\*\*, W. Balke\*\*, B. Fink\*\*, R. E. H. Ferguson \*\*