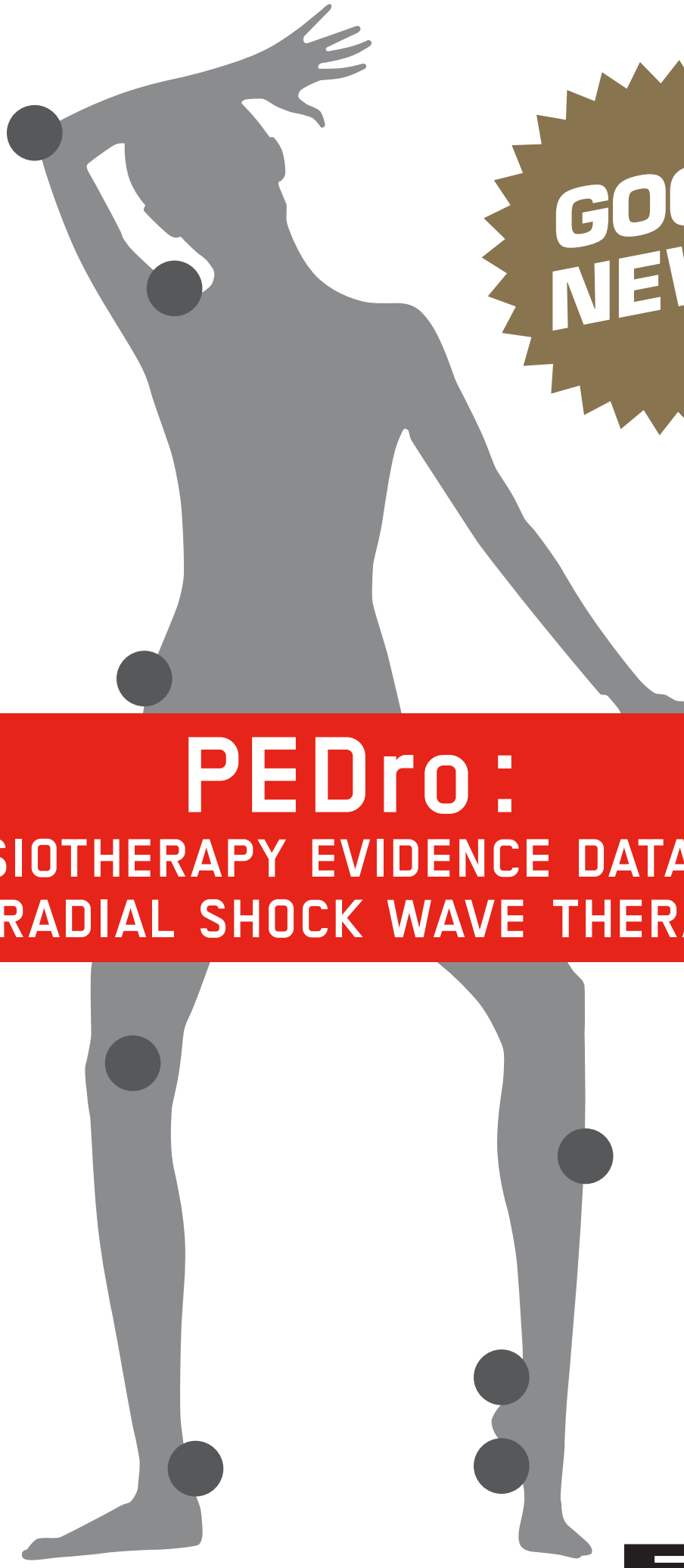


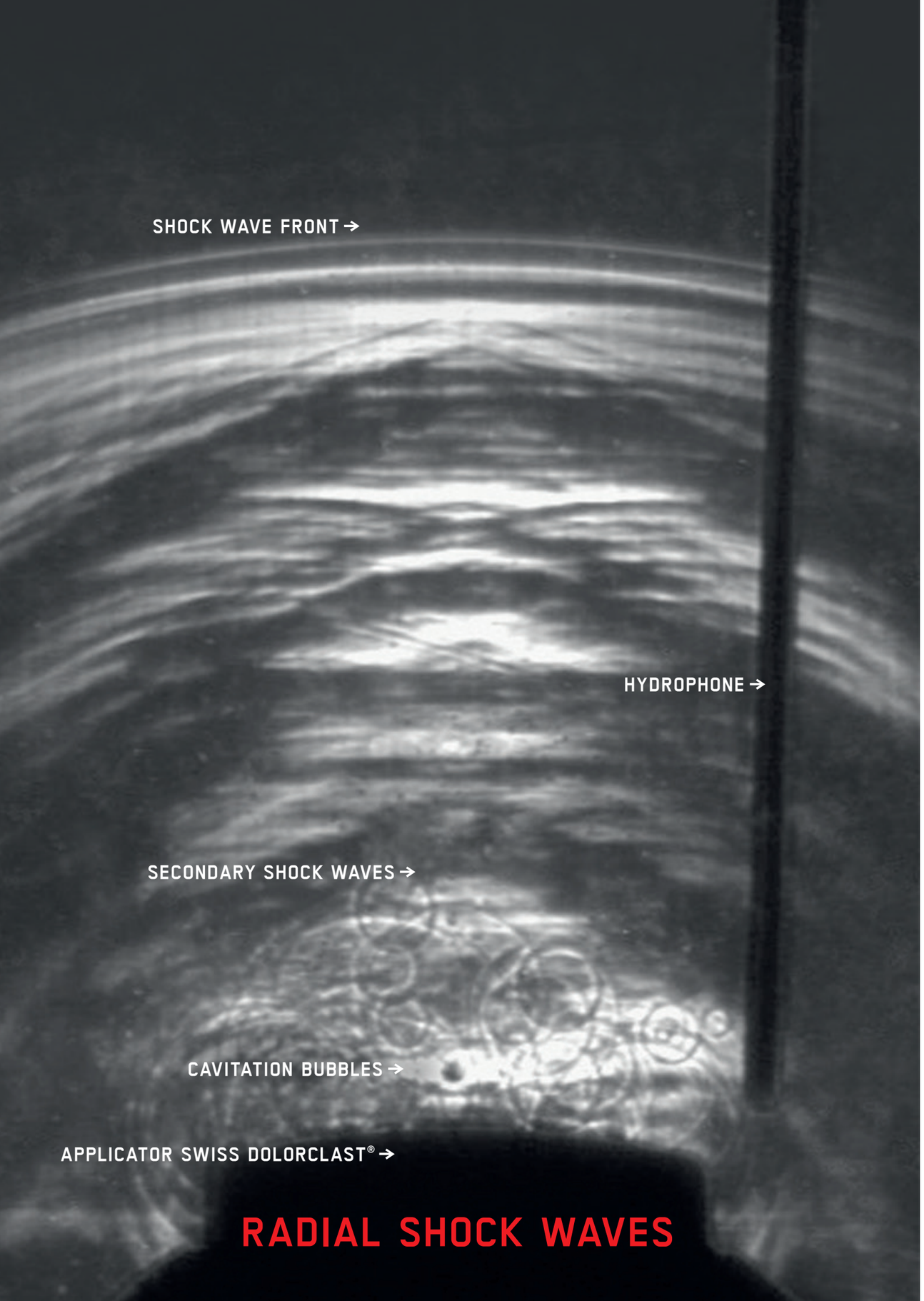
GOOD NEWS

PEDro:

PHYSIOTHERAPY EVIDENCE DATABASE

→ RADIAL SHOCK WAVE THERAPY

EMS
ELECTRO MEDICAL SYSTEMS



PEDro DATABASE
INCLUSION CRITERIA

TOP-NOTCH CLINICAL SCIENCE

→ FOR YOUR DAILY PRACTICE

PEDRO IS A FREE DATABASE OF OVER 28'000 RANDOMIZED CLINICAL TRIALS (RCTs), SYSTEMATIC REVIEWS AND CLINICAL PRACTICE GUIDELINES IN PHYSIOTHERAPY

> Only full papers (not abstracts) published in peer-reviewed journal can be selected in the PEDro database.

> For each RCT, review or guideline, PEDro provides the citation details, the abstract and a link to the full text, where possible.

> All RCTs on PEDro are independently assessed for quality. These quality ratings are used to quickly guide users to RCTs that are more likely to be valid and to contain sufficient information to guide clinical practice.

WHEN ENTERING THE KEY WORDS "RADIAL SHOCK WAVE THERAPY" TO SEARCH THE WEBSITE WWW.PEDRO.ORG.AU

THE WINNER IS →

THE PEDRO DATABASE (www.PEDro.org.au)

WAS DEVELOPED BY THE GEORGE INSTITUTE FOR GLOBAL HEALTH AFFILIATED WITH THE UNIVERSITY OF SYDNEY, AUSTRALIA

PEDro DATABASE

EVALUATION

15:20 CLINICAL STUDIES PERFORMED WITH THE SWISS DOLORCLAST®

PEDro QUALITY CRITERIA →

10	9	8	7	6	5	4	3	2	1	S	INDICATIONS	STUDIES	O*	DEVICES
+	+	+	+	+	-	+	+	+	+	9/10	Calcifying tendinitis of the shoulder	Cacchio et al. 2006	+	Not specified (Elettronica Pagani)
+	+	+	+	+	-	+	+	+	+		Plantar fasciopathy	Gerdesmeyer et al. 2008	+	Swiss DolorClast® (EMS)
+	+	+	+	+	-	+	+	+	+			Ibrahim et al. 2010	+	Swiss DolorClast® (EMS)
+	+	+	+	+	-	(-)	+	+	+	8/10	Achilles tendinopathy	Rompe et al. 2007	+	Swiss DolorClast® (EMS)
+	+	+	+	+	-	(-)	+	+	+			Rompe et al. 2008	+	Swiss DolorClast® (EMS)
+	+	+	+	+	-	(-)	+	+	+			Rompe et al. 2009a	+	Swiss DolorClast® (EMS)
+	+	+	+	+	-	(-)	+	+	+		Plantar fasciopathy	Rompe et al. 2010	-	Swiss DolorClast® (EMS)
+	+	+	+	+	-	+	+	-	+			Lohrer et al. 2010	+	Duolith SD 1 radial part (Storz)
+	+	+	-	-	-	+	+	+	+	7/10	Calcifying tendinitis of the shoulder	Kolk et al. 2013	-	Swiss DolorClast® (EMS)
+	+	+	+	-	-	(-)	+	+	+		Subacromial pain	Engebretsen et al. 2011	-	Swiss DolorClast® (EMS)
+	+	-	+	+	-	-	+	+	+		Lateral epicondylitis	Gündüz et al. 2012	+	Not specified
+	+	-	+	+	-	+	+	-	+		Plantar fasciopathy	Chow and Cheing 2007	+	Swiss DolorClast® (EMS)
+	+	-	-	+	-	+	+	-	+	6/10	Plantar fasciopathy	Shaheen 2010	+	Swiss DolorClast® (EMS)
+	+	-	+	-	-	+	+	-	+	5/10	Nonspecific shoulder pain	Damain and Zalpour 2011	+	Masterpulse MP 200 (Storz)
+	+	-	+	-	-	-	+	-	+		Primary long bicipital tenosynovitis	Liu et al. 2012	+	Swiss DolorClast® (EMS)
+	+	-	+	-	-	-	+	-	+		Myofascial pain syndrome	Cho et al. 2012	+	JEST-2000 (Joeunmedical, Korea)
+	+	-	+	-	-	-	+	-	+		Lateral and medial epicondylitis	Lee et al. 2012	+	Swiss DolorClast® (EMS)
+	+	+	+	-	-	(-)	+	-	-		Greater trochanteric pain syndrome	Rompe et al. 2009b	+	Swiss DolorClast® (EMS)
+	+	-	+	-		-	-	-	+	4/10	Plantar fasciopathy and tennis elbow	Mehra et al. 2003	+	Swiss DolorClast® (EMS)
+	+	-	-	+	-	-	-	-	+		Spasticity	Vidal et al. 2011	+	Swiss DolorClast® (EMS)

1 Subjects randomly allocated to groups

2 Concealed allocation

3 Groups similar at baseline regarding the most important prognostic indicators

4 Subjects blinding

5 All therapists who administered the therapy were blinded

6 All assessors who measured at least one key outcome were blinded

7 Measures of at least one key outcome obtained from more than 85% of the subjects initially allocated to groups

8 All subjects for whom outcome measures were available received the treatment or control condition as allocated or, where this was not the case, data for at least one key outcome was analysed by "intention to treat"

9 The results of between-group statistical comparisons reported for at least one key outcome

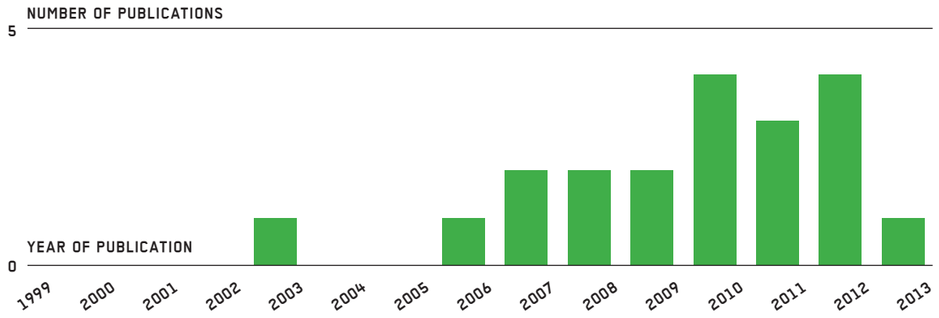
10 Both point measures and measures of variability for at least one key outcome provided

* OUTCOME OF THE STUDY

\+ Radial shock wave therapy significantly better statistically than either placebo or alternative treatment modalities

\- Radial shock wave therapy significantly not better statistically than either placebo or alternative treatment modalities

SUCCESSFUL FROM THE START → CONTINUOUSLY IMPROVED



> Radial Shock Wave Therapy was invented by EMS in 1999. It immediately found its place in pain management of the musculoskeletal system, and has since become an integral part of everyday clinical practice

PEDro IS VALID

> De Morton NA. The PEDro scale is a valid measure of the methodological quality of clinical trials: a demographic study. Aust J Physiother 2009;55(2):129-133.

THE RELIABILITY OF THE PEDro SCALE FOR RATING THE QUALITY OF RANDOMIZED CONTROLLED TRIALS WAS DEMONSTRATED IN THE LITERATURE

> Maher CG, Sherrington C, Herbert RD, Moseley AM, Elkins M. Reliability of the PEDro scale for rating quality of randomized controlled trials. Phys Ther 2003;83(8):713-721.

CACCHIO A, PAOLONI M, BARILE A, DON R, DE PAULIS F, CALVISI V, RANAVOLO A, FRASCARELLI M, SANTILLI V, SPACCA G. Effectiveness of radial shock wave therapy for calcific tendinitis of the shoulder: single-blind, randomized clinical study. Physical Therap 2006;86(5):672–682.

CHO YS, PARK SJ, JANG SH, CHOI YC, LEE JH, KIM JS. Effects of the combined treatment of extracorporeal shock wave therapy (ESWT) and stabilization exercises on pain and functions of patients with myofascial pain syndrome. J Phys Ther Sci 2012;24:1319-1323.

CHOW IHW, CHEING GLY. Comparison of different energy densities of extracorporeal shock wave therapy (ESWT) for the management of chronic heel pain. Clin Rehabil 2007;21(2):131–141.

DAMIAN M, ZALPOUR C. Trigger point treatment with radial shock waves in musicians with nonspecific shoulder-neck pain: data from a special physio outpatient clinic for musicians. Med Probl Perform Art 2011;26(4):211–217.

ENGEBRETSEN K, GROTLE M, BAUTZ-HOLTER E, EKEBERG O, JUEL N, BROX J. Supervised exercises compared with radial extracorporeal shock wave therapy for subacromial shoulder pain: 1-year results of a single-blind randomized controlled trial. Phys Ther 2011;91(1):37–47.

GERDESMEYER L, FREY C, VESTER J, MAIER M, WEIL L JR, WEIL L SR, RUSSLIES M, STIENSTRA J, SCURRAN B, FEDDER K, DIEHL P, LOHRER H, HENNE M, GOLLWITZER H. Radial extracorporeal shock wave therapy is safe and effective in the treatment of chronic recalcitrant plantar fasciitis: results of a confirmatory randomized placebo-controlled multicenter study. Am J Sports Med 2008;36(11):2100–2109.

GÜNDÜZ R, MALAS FU, BORMAN P, KOCAOGLU S, OZCAKAR L. Physical therapy, corticosteroid injection, and extracorporeal shock wave treatment in lateral epicondylitis: clinical and ultrasonographical comparison. Clin Rheumatol 2012;31(5):807–812.

IBRAHIM MI, DONATELLI RA, SCHMITZ C, HELLMAN MA, BUXBAUM F. Chronic plantar fasciitis treated with two sessions of radial extracorporeal shock wave therapy. Foot Ankle Int 2010;31(5):391–397.

KOLK A, AUW YANG KG, TAMMINGA R, HOEVEN H. Radial extracorporeal shock-wave therapy in patients with chronic rotator cuff tendinitis: a prospective randomised double-blind placebo-controlled multicentre trial. Bone Joint J 2013;95–B(11):1521–1526.

LEE SS, KANG S, PARK NK, LEE CW, SONG HS, SOHN MK, CHO KH, KIM JH. Effectiveness of initial extracorporeal shock wave therapy on the newly diagnosed lateral or medial epicondylitis. Ann Rehabil Med 2012;36:681-687.

LIU S, ZHAI L, SHI Z, JING R, ZHAO B, XING G. Radial extracorporeal pressure pulse therapy for the primary long bicipital tenosynovitis: a prospective randomized controlled study. Ultrasound Med Biol 2012;38:727-735.

LOHRER H, NAUCK T, DORN-LANGE NV, SCHOLL J, VESTER JC. Comparison of radial versus focused extracorporeal shock waves in plantar fasciitis using functional measures. Foot Ankle Int 2010;31(1):1–9.

MEHRA A, ZAMAN T, JENKIN AI. The use of a mobile lithotripter in the treatment of tennis elbow and plantar fasciitis. Surgeon 2003;1:290-292.

ROMPE JD, NAFE B, FURIA JP, MAFFULLI N. Eccentric loading, shock-wave treatment, or a wait-and-see policy for tendinopathy of the main body of tendo Achillis: a randomized controlled trial. Am J Sports Med 2007a;35(3):374–383.

ROMPE JD, FURIA JP, MAFFULLI N. Eccentric loading compared with shock wave treatment for chronic insertional Achilles tendinopathy. A randomized, controlled trial. J Bone Joint Surg Am 2008;90(1):52–61.

ROMPE JD, FURIA JP, MAFFULLI N. Eccentric loading versus eccentric loading plus shock-wave treatment for midportion Achilles tendinopathy: a randomized controlled trial. Am J Sports Med. 2009a;37(3):463–470.

ROMPE JD, SEGAL NA, CACCHIO A, FURIA JP, MORRAL A, MAFFULLI N. Home training, local corticosteroid injection, or radial shock wave therapy for greater trochanter pain syndrome. Am J Sports Med 2009b;37:1981-1990.

ROMPE JD1, CACCHIO A, WEIL L JR, FURIA JP, HAIST J, REINERS V, SCHMITZ C, MAFFULLI N. Plantar fascia-specific stretching versus radial shock-wave therapy as initial treatment of plantar fasciopathy. J Bone Joint Surg Am 2010 3;92(15):2514–2522.

SHAHEEN AAM. Comparison of three different treatment protocols of low-energy radial extracorporeal shock wave therapy for management of chronic plantar fasciitis. Indian J Physiother Occupat Therap 2010;4(1):8–12.

VIDAL X, MORRAL A, COSTA L, TURA M. Radial extracorporeal shock wave therapy (rESWT) in the treatment of spasticity in cerebral palsy: A randomized, placebo-controlled clinical trial. NeuroRehabilitation 2011;29(4):413-419.

SDC-ACADEMY.COM

SWISS DOLORCLAST®
ACADEMY

RSWT® IN THEORY AND PRACTICE

→ JOIN THE CLUB

SWITZERLAND

EMS
ELECTRO MEDICAL SYSTEMS SA
Chemin de la Vuarpillière 31
CH-1260 Nyon

Tel: +41 (0) 22 99 44 700
Fax: +41 (0) 22 99 44 701
E-Mail: welcome@ems-ch.com
Website: www.ems-medical.com