

Table I. Basal characteristics of randomized controlled trials included in this meta-analysis

Study	Country	Participants (M/F) n	Mean age, years	Interventions	Treat muscle	Energy/pressure	Therapy site	Dosage	Tested muscle	Frequency (Hz)	Sessions n	Outcome measure	Follow-up
Bae et al. 2010 (25)	Korea	32 (20/12)	55.05	Experimental group: Active ESWT Control group: Sham ESWT	Biceps brachii	0.12 mJ/mm ²	Muscle belly, Myotendinous Junction	1,200 shots	Elbow flexor	4	3	MAS, MTS, K-MBI,	4 weeks
Fouda & Sharaf 2015 (26)	Egypt	30 (30/0)	52.28	Experimental group: ESWT + traditional physical therapy treatment Control group: Placebo ESWT + traditional physical therapy treatment	Flexor muscles of the forearm, palmar interosseous muscles of the hand	0.23 mJ/mm ²	Myotendinous junction	1,500 shots for flexor muscles of the forearm, 3,200 shots for palmar interosseous muscles of the hand	Wrist flexor, finger flexor	8	5	MAS, VAS, ROM	NA
Dymarek et al. 2016 (27)	Poland	60 (34/26)	61.15	Experimental group: Active ESWT Control group: Placebo ESWT	Flexor carpi radialis, flexor carpi ulnaris biceps brachii	0.03 mJ/mm ²	Muscle belly	1,500 shots	Wrist flexor, Finger flexor	5	1	MAS, sEMG recordings, IRT imaging	24 h
Kim et al. 2016 (28)	Korea	34 (17/17)	66.00	Experimental group: Active ESWT Control group: Placebo ESWT	subscapularis	0.39–1.95 mJ/mm ²	Muscle belly	1,500 shots	Shoulder external rotator muscles	12	8	MAS, VAS, CS, FMA-UE, ROM	4 weeks
Li et al. 2016 (29)	China	40 (26/14)	55.65	Experimental group: Active ESWT Control group: Sham ESWT	Flexor carpi radialis, flexor carpi ulnaris, intrinsic muscles and flexor digitorum tendon of the hand	3.5 bar	Muscle belly	1,500 shots for flexor carpi radialis, and flexor carpi ulnaris, 4,000 shots for the intrinsic muscles and flexor digitorum tendon of the hand	Wrist flexor Finger flexor	5	3	MAS, FMA	16 weeks
Yoon et al. 2017 (30)	Korea	124 (118/6)	65.08	Experimental group: Active ESWT Control group: Placebo ESWT	Biceps brachii gastrocnemius	0.068–0.093 mJ/mm ²	Muscle belly, myotendinous junction	1,500 shots	Elbow flexor knee flexor	5	3	MAS, MTS	NA
Taheri et al. 2017 (31)	Iran	25 (17/8)	55.70	Experimental group: ESWT + anti-spastic medications + stretching exercises Control group: anti-spastic medications + stretching exercises	Gastrocnemius	0.1 mJ/mm ²	Myotendinous junction	1,500 shots	Plantar flexor	4	3	MAS, VAS, Clonus score, 3-m walk duration, LEFS	12 weeks
Sawan et al. 2017 (32)	Egypt	40 (NA)	67.7	Experimental group: Active ESWT + Physical therapy Control group: Placebo ESWT + Physical therapy	Gastrocnemius		Muscle belly	1,500 shots	Ankle dorsiflexion	NA	NA	H/M ratio, ROM, The timed 10 meters walk test	NA

ESWT: extracorporeal shock wave therapy; NA: not available; MAS: Modified Ashworth Scale; MTS: Modified Tardieu Scale; FMA: Fugl-Meyer Assessment; VAS: visual analogue scale; CS: Constant-Murley scale; K-MBI: Korean-modified Barthel index; ROM: range of motion; FMA-UE: Fugl-Meyer Assessment upper extremity; LEFS: lower extremity functional score; M: male; F: female.