

Not just folk medicine: myofascial cupping in the tech age!

Mini Review

You saw it on the Olympian swimmers in the 2016 Games, on Michael Phelps, on the backs of actresses sashaying down the red carpet, including Gwyneth Paltrow, Jessica Simpson, Victoria Beckham, Jennifer Aniston, and David Arquette. Serena Williams, Justin Bieber and Kim Kardashian also joined the “new” trend in experiencing this ancient modality. Those blotchy red or purple marks and perfect circles are the tell-tale of the cupping procedures familiar to practitioners of Asian and traditional bodywork and folk medicine, used for centuries. History indicates cupping was used centuries ago in ancient Asia, China, (Ge Hong) Egypt, (Ebers Papyrus), and Greece (Hippocrates). The original cups were hollowed horns or bones of animals and bamboo plants, used to suck out toxins from snakebites and insect venom. Over the years, practitioners of Traditional Chinese Medicine have used glass fire-cups combined with acupuncture or even bloodletting (wet cupping) for a variety of clinical conditions. Over time the cups were refined to produce the ones we use today, composed of glass, plastic, rubber, or silicone. Western clinicians are now using cupping as a manual therapy or soft tissue release tool, such as foam rollers, massage balls, and stretch bands. The procedure is known as dry cupping. Let’s take a look at some of the recent evidence-based literature regarding the effects of dry cupping.

In a randomized controlled trial (RCT) of 70 soccer players, Fousekis et al.¹ compared the results of three interventions on myofascial trigger point pain in the low back: instrument-assisted soft tissue mobilization, static dry cupping and ischemic pressure, applied once weekly for 3 weeks. All interventions demonstrated a significant improvement in pressure pain thresholds, although the former showed the most improvement.¹ In a RCT of 50 patients with chronic neck pain, Saha et al.² showed improved function, mental health, quality of life and decreased pain after five 10-minute sessions of gliding cupping over two weeks.² Cao et al.³ published a systematic review of clinical evidence for cupping therapy in 2015. They reported a need for additional rigorous studies since the ones reviewed showed either inadequate methodological quality or an insufficient number of trials. For the trials meeting established criteria for inclusion the systematic review, they found that cupping therapy was superior to interventions including medications for conditions such as low back pain and cervical spondylosis, facial paralysis, acne and herpes zoster.³ In a single blind RCT in 60 subjects with chronic neck and shoulder pain, Chi et al.⁴ reported a significant reduction in neck pain intensity and elevation in skin surface temperature after a single treatment of 10 minutes of static fire cupping bilaterally to three acupuncture points (SI15, GB21, LI15, in upper trapezius and deltoid).⁴

Markowski et al.⁵ reported significant improvement in low back pain, range of motion, and leg raise in 21 subjects given cupping with four pressurized cups over the low back.⁵ These are just a sample of the studies available on cupping therapy. Rozenfeld and Kalichman provided a summary of cupping methods and literature review, in which they discussed the physiological effect of cupping, including increased circulation, immune system activation, lymphatic

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flow enhancement, mechanoreceptor stimulation with resultant reduction in nociceptive input and gating of pain. Several studies demonstrated the efficacy of cupping for a variety of musculoskeletal conditions. More research is advised to determine the mechanisms involved in the physiological response to cupping, and to compare the effects of cupping to other standard interventions used to manage musculoskeletal dysfunction.⁶⁻²²

Conflicts of interest

None.

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