Priority Health

MEDICAL POLICY
No. 91527-R3

EXTRACORPOREAL SHOCK WAVE THERAPY (ESWT)

Effective Date: March 1, 2025	**Review Dates: 4/07, 2/08, 2/09, 2/10, 2/11, 2/12, 2/13, 2/14, 2/15, 2/16, 2/17, 2/18, 2/19, 2/20, 2/21, 2/22, 2/23, 2/24, 2/25**
Date of Origin: April 11, 2007	**Status: Current**

Related policies: *Foot Care* # 91121

Summary of Changes

- Addition: Low intensity ESWT for the treatment of erectile dysfunction is considered experimental and investigational.

I. POLICY/CRITERIA

1. Extracorporeal Shock Wave Therapy (ESWT) is not medically necessary for the following conditions:
   a. Orthopedic or musculoskeletal applications including but not limited to plantar fasciitis, wound healing, epicondylitis of the elbow due to insufficient evidence of the effectiveness of ESWT on musculoskeletal conditions or tissue injuries.
2. Low intensity ESWT (Li-ESWT) is considered experimental and investigation for the treatment of erectile dysfunction.

II. MEDICAL NECESSITY REVIEW

Prior authorization for certain drug, services, and procedures may or may not be required. In cases where prior authorization is required, providers will submit a request demonstrating that a drug, service, or procedure is medically necessary. For more information, please refer to the Priority Health Provider Manual.

III. APPLICATION TO PRODUCTS

Coverage is subject to member's specific benefits. Group specific policy will supersede this policy when applicable.

- **HMO/EPO:** ***This policy applies to insured HMO/EPO plans.***
- **POS:** ***This policy applies to insured POS plans.***
- **PPO:** ***This policy applies to insured PPO plans. Consult individual plan documents as state mandated benefits may apply. If there is a conflict between this policy and a plan document, the provisions of the plan document will govern.***
- **ASO:** ***For self-funded plans, consult individual plan documents. If there is a conflict between this policy and a self-funded plan document, the provisions of the plan document will govern.***

- **INDIVIDUAL:** ***For individual policies, consult the individual insurance policy. If there is a conflict between this medical policy and the individual insurance policy document, the provisions of the individual insurance policy will govern.***
- **MEDICARE:** ***Coverage is determined by the Centers for Medicare and Medicaid Services (CMS) and/or the Evidence of Coverage (EOC); if a coverage determination has not been adopted by CMS, this policy applies.***
- **MEDICAID/HEALTHY MICHIGAN PLAN:** ***For Medicaid/Healthy Michigan Plan members, this policy will apply. Coverage is based on medical necessity criteria being met and the appropriate code(s) from the coding section of this policy being included on the Michigan Medicaid Fee Schedule located at: http://www.michigan.gov/mdch/0,1607,7-132-2945_42542_42543_42546_42551-159815--,00.html. If there is a discrepancy between this policy and the Michigan Medicaid Provider Manual located at: http://www.michigan.gov/mdch/0,1607,7-132-2945_5100-87572--,00.html, the Michigan Medicaid Provider Manual will govern. For Medical Supplies/DME/Prosthetics and Orthotics, please refer to the Michigan Medicaid Fee Schedule to verify coverage.***

IV. DESCRIPTION

Extracorporeal shock wave therapy (ESWT) is a non-invasive treatment using low- or high-energy pulses from 3-dimensional acoustic energy or shock waves, which can be focused and then propagated through water within body tissues (Schmitz et al., 2013). ESWT is performed in an outpatient setting, usually with the use local anesthesia or a regional block. ESWT has been used in the treatment of musculoskeletal conditions that are not responsive to conservative measures with the goal of reducing pain and promoting healing of the affected soft tissue. ESWT is intended as a noninvasive alternative to surgical treatment for chronic plantar fasciitis, chronic epicondylitis of the elbow, and other chronic musculoskeletal conditions. Chronic musculoskeletal conditions include a wide range of inflammatory and degenerative conditions of the musculoskeletal system. These disorders sometimes respond poorly to conservative treatments such as rest, medications, physical therapy, and/or corticosteroid injections. Surgery is an option but involves recovery time and possible morbidity. ESWT has also been proposed as a treatment for various chronic orthopedic conditions including tendonitis of the shoulder. Current theories include stimulation of healing after increased release of growth factors and neovascularization in the environment of local tissue injury. Many of these trials are not of sufficient quality to provide a reliable assessment of the effectiveness of ESWT (Wright, 2009). There are no established treatment protocols for ESWT, including energy density, number of sessions and shocks used, localization of shock waves, and whether local anesthesia is used.

Plantar fasciitis, also referred to as heel spurs, is thought to result from a biomechanical imbalance that puts abnormal tension on the plantar fascia, causing inflammation of the fascia, and tension on the calcaneal periosteum. Shock waves may be focused or radial. Focused shock waves are capable of high tissue penetration and may be generated using electrohydraulic, electromagnetic, or piezoelectric technology. Both focused and radial ESWT have been proposed as

treatments for plantar fasciitis. Radial ESWT uses pneumatic waves generated from air pressure that causes a projectile to hit the end of the applicator at high speed. Pneumatic devices deliver radially expanding shock waves to a wider area at a relatively low energy level (Dizon et al., 2013; Schmitz et al., 2013; Lohrer et al., 2016). It is hypothesized that the shock waves may reduce transmission of pain signals from sensory nerves in the plantar fascia through the rapid buildup of positive pressure or a more indirect effect through the implosion of bubbles in the interstitial fluid, causing calcium deposits to disintegrate, break down scarring, leading to transient inflammatory response, and/or stimulate tissue healing (Perez et al., 2003; Roehrig et al., 2005. However, the mechanism by which ESWT provides benefit is investigational because there are no established treatment parameters for ESWT. Substantial heterogeneity in treatment protocols and outcome measures used to assess efficacy of ESWT contribute to the inconsistent findings across studies. Additionally, there is insufficient evidence concerning the long-term safety and efficacy.

Low-intensity extracorporeal shockwave therapy (Li-ESWT), a form of ESWT, has been proposed as a treatment for erectile dysfunction (ED). It is proposed that increased penile angiogenesis induced by Li-EWST may increase penile blood flow and erectile function. A major limitation to most Li-ESWT studies is the lack of randomization to a sham control cohort, most studies include small and heterogeneous cohorts. There are currently three types of Li-ESWT generators available on the market: electrohydraulic, electromagnetic, and piezoelectric (Liu, 2021). Studies have varied by shockwave generator types and protocols (e.g., energy settings, dosing, frequency of use, probe locations, and duration of therapy) thereby making comparison difficult. Clinical practice guidelines and position statements, guidance appears to confer no or unclear support for Li-ESWT for treatment of ED. The AUA considers Li-EWST investigational for men with ED (Burnett, 2018). Sexual Medicine Society of North America (SMSNA) holds the position that there is an absence of robust clinical trial data supporting restorative therapies' efficacy in humans (Liu, 2021).

V. CODING INFORMATION

CPT/HCPCS Codes

Not covered for any indication:

0101T Extracorporeal shock wave involving musculoskeletal system, not otherwise specified

0102T Extracorporeal shock wave performed by a physician, requiring anesthesia other than local, and involving the lateral humeral epicondyle

0512T Extracorporeal shock wave for integumentary wound healing, including topical application and dressing care; initial wound

0513T Extracorporeal shock wave for integumentary wound healing, high energy, including topical application and dressing care; each additional wound (List separately in addition to code for primary procedure)
0864T Low-intensity extracorporeal shock wave therapy involving corpus cavernosum, low energy
28890 Extracorporeal shock wave, high energy, performed by a physician, requiring anesthesia other than local, including ultrasound guidance, involving the plantar fascia
28899 Unlisted procedure, foot or toes *(Explanatory notes must accompany claim)*
20999 Unlisted procedure, musculoskeletal system, general *(Explanatory notes must accompany claim)*

VI. REFERENCES

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