

## Medical Coverage Policy | Electrothermal Therapy for Joint Instability



**EFFECTIVE DATE:** 07|05|2007  
**POLICY LAST UPDATED:** 02|04|2014

### OVERVIEW

Electrothermal therapy, also known as thermal capsulorrhaphy, thermal coagulation of joints, radiofrequency thermal shrinkage (RFTS), electrothermal assisted capsulorrhaphy (ETAC), and laser-assisted capsular shrinkage (LACS), is a minimally invasive arthroscopic procedure to tighten the capsule, tendons and ligaments of a joint. It has been proposed as a way to treat some orthopedic conditions; including, but not limited to, shoulder instability and anterior cruciate ligament (ACL) laxity in the knee.

### PRIOR AUTHORIZATION

Not applicable.

### POLICY STATEMENT

#### Blue CHiP for Medicare and Commercial

Electrothermal Therapy is considered **not medically necessary** as a treatment of ligamentous laxity, ligament injury, or joint instability, including, but not limited to the shoulder, hip, knee, ankle, elbow and wrist.

The long term safety and efficacy of this treatment has not been documented in the peer-reviewed medical literature, with no controlled studies found providing evidence which demonstrates an impact on improved health outcomes.

### MEDICAL CRITERIA

Not applicable.

### BACKGROUND

Tendons and ligaments are primarily composed of collagen, a type of protein. When collagen is heated to the appropriate temperature, it contracts and shrinks. The collagen proteins making up the tendons and ligaments are seemingly altered by the heat and recoil from their normal straight arrangement. The body perceives this as an injury and the tissues rebuild around shorter collagen fibers, with the desired result as a reduction in the laxity of the joint, shrinkage and decrease in capsular volume and, therefore a tighter and theoretically more stable joint.

Shoulder instability may arise from a single traumatic event (i.e., subluxation or dislocation), repeated micro-trauma or congenital ligament laxity, resulting in deformity and/or damage to the shoulder capsule and ligaments.

Initial treatment of shoulder instability is conservative in nature followed by range of motion and strengthening exercises. However, if instability persists, either activity modifications or surgical treatment may be considered.

Surgery consists of inspection of the shoulder joint with repair, reattachment, or tightening of the labrum, ligaments, or capsule, performed either with sutures or sutures attached to absorbable tacks or anchors. Thermal capsulorrhaphy has been proposed as a technically simpler arthroscopic technique than intra-articular suturing with absorbable tacks or anchors, for tightening the capsule and ligaments. The technique is

based on the observation that the use of low levels of thermal energy can alter the collagen in the ligaments and/or capsule, resulting in their shrinkage and a decrease in capsular volume, both thought to restore capsular tension.

Electrothermal therapy has been used as an arthroscopic treatment for laxity and instability of the knee. Attempts made to shrink and shorten the fibers of the ACL have been made when there has been a partial tear from a traumatic injury or when the ACL has been stretched by reconstructive surgery. The procedure, which can be used alone or in conjunction with other arthroscopic procedures, most frequently is performed on the shoulder, although it has been performed on other joints, such as the hip, knee, ankle, elbow, and wrist.

The limited literature currently available does not provide support for the use of thermal capsulorrhaphy alone, or in combination with other arthroscopic procedures. Because of the lack of efficacy, this procedure is considered not medically necessary.

### COVERAGE

Benefits may vary between groups/contracts. Please refer to the appropriate Evidence of Coverage or Subscriber Agreement for limitations of benefits/coverage when services are not medically necessary.

### CODING

#### Blue CHiP for Medicare and Commercial

As there is no specific CPT code available for the use of electrothermal therapy in the ankles, knees, hip, wrist, or elbow the following unlisted code would be used.

**29999**

The following HCPCS code is considered **not medically necessary**:

**S2300**

### RELATED POLICIES

Not applicable.

### PUBLISHED

Provider Update	Apr 2014
Provider Update	Nov 2012
Provider Update	Oct 2011
Provider Update	Oct 2010
Provider Update	Sep 2009
Provider Update	Jul 2008
Policy Update	Sep 2007

### REFERENCES

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