Anthem

Medical Policy

Subject: Electrothermal Shrinkage of Joint Capsules, Ligaments, and Tendons
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Description/Scope

This document addresses the use of electrothermal shrinkage as a stand-alone treatment or as an adjunct to arthroscopic or open surgery for the tightening of joint capsules, ligaments, and tendons.

Position Statement

Investigational and Not Medically Necessary:

Electrothermal shrinkage used as a stand-alone treatment or as an adjunct to arthroscopic or open surgery is considered **investigational and not medically necessary** for all indications, including but not limited to the tightening of joint capsules, ligaments, and tendons.

Rationale

Electrothermal shrinkage of joint capsules, ligaments, and tendons has been proposed as a stand-alone technique or as an adjunct to arthroscopic or open surgery for tightening the structures of the ankles, hips, knees, shoulders, or wrists. Electrothermal shrinkage therapies include, but are not limited to, arthroscopic thermal capsulorrhaphy, electrothermal arthroscopic capsulorrhaphy (ETAC), electrothermal capsulorrhaphy, thermal capsular shrinkage, thermal capsulorrhaphy, electrothermal therapy, radiofrequency thermal shrinkage, and thermal shrinkage.

Electrothermal Treatment for Conditions of the Shoulder

The peer-reviewed literature evaluating the use of electrothermal shrinkage as a stand-alone arthroscopic procedure or as an adjunct to other arthroscopic or open surgical procedures for conditions of the shoulder (for example, capsular laxity, shoulder instability, capsulolabral avulsion, internal impingement, labral tears, traumatic dislocation) includes prospective and retrospective case series with and without a control group (Chen, 2005; Engelsma, 2010; Levitz, 2001; Levy, 2001; Miniaci, 2003; Mishra, 2001; Savoie, 2000). Some authors suggest success rates similar to open surgical repair of the shoulder; however, these case series are limited in that they involve small groups of participants or report only short-term outcomes. In a small case series (n=18 shoulders), Engelsma and Willems (2010) concluded that thermal capsular shrinkage of posterior shoulder instability “showed poor results and should be abandoned for this indication.”

Failure and complication rates of thermal capsulorrhaphy to treat shoulder ligament instability are generally high and are often related to recurrent instability. D’Alessandro and colleagues (2004) conducted a nonrandomized, prospective study of 81 participants (84 shoulders) who underwent thermal capsulorrhaphy of the shoulder for traumatic anterior dislocation, recurrent anterior or anterior/inferior subluxation without prior dislocation, and multidirectional instability. Outcome measures evaluated after an average follow-up of 38 months included pain, instability, return to work, and the overall American Shoulder and Elbow Surgeons (ASES) Shoulder Assessment score. The authors reported 33 cases (39%) with excellent scores; 20 cases (24%) with satisfactory scores; and 31 cases (37%) with unsatisfactory scores, stating that the high rate of unsatisfactory results was of great concern.

Hawkins and colleagues (2007) reported on a case series that evaluated 2- to 6-year follow-up outcomes of 85 of 100 consecutive participants treated with thermal capsulorrhaphy for glenohumeral instability; 24 participants had an associated Bankart lesion. A total of 37 participants (43.5%) were considered to have had a failed procedure, defined as shoulders requiring revision stabilization (n=14), recurrent instability (n=18), recalcitrant pain (n=3), or stiffness (n=2). For participants with anterior instability plus a Bankart lesion, 7 of 24 participants (26%) had failed results. For those with anterior instability without a Bankart lesion, 10 of 27 participants (33%) had failed results. The failure rates for posterior, multidirectional instability, and anteroposterior were 60% (6 of 10), 59% (10 of 17), and 57% (4 of 7), respectively. Of the 48 successes, the mean preoperative ASES score improved from 71 to 96; participant satisfaction was 9.1 on a 10-point scale. The authors concluded that the failure rate compares unfavorably with the reported 7.5% failure rate when thermal capsulorrhaphy is used to supplement suture plication, and they now generally use it only in combination with other surgical procedures.

Johnson and Robinson (2010) reported that although initial results using thermal capsulorrhaphy in the treatment of shoulder instability in individuals with joint hyperlaxity seemed promising, subsequent studies with longer follow-up showed “unacceptably high rates of failure and postoperative complications” including cases of postoperative axillary nerve palsy and transient deltoid weakness. Abnormal capsular tissue has also been observed in the areas of previous thermal treatment, with either severe thickening or thin, friable deficient capsule.

Jansen and colleagues (2012) evaluated long-term results of arthroscopic thermal shrinkage of the anterior capsule in athletes with internal shoulder impingement. A total of 12 athletes underwent traditional arthroscopic treatment plus thermal capsulorrhaphy for internal impingement. All athletes were evaluated 1, 2, and 7 years postoperatively using a questionnaire regarding their sports activity and the modified Rowe score. A significant improvement was reported in the modified Rowe score at all 3 postoperative measurements when compared to the preoperative scores. However, follow-up at 7 years showed a significant deterioration of the initial 1- and 2-year results ($p<0.001$), with only 25% of the athletes able to perform sports at their preoperative level. Despite significant improvement reported in the short-term results with thermal capsulorrhaphy and traditional arthroscopic treatment, improvement was not sustained over time.

Mohtadi and colleagues (2014) performed a multicenter, randomized clinical trial with industry support that evaluated the safety and efficacy of ETAC compared with open inferior capsular shift (ICS) in participants diagnosed with multidirectional instability or multidirectional laxity with anteroinferior instability of the shoulder. Participants failed nonoperative treatment and the study excluded participants with bone lesions, labral, biceps anchor, or full-thickness rotator cuff tears. Outcome measures included function and recurrent instability at 2 years postoperatively, surgical times, and Western Ontario Shoulder Instability Index. A total of 54 participants (> 14 years; mean age, 23 years) were randomized to ETAC (n=28) or open ICS (n=26). The groups were comparable at baseline, except for external rotation. At 2 years postoperatively, there were no statistically or clinically significant differences between groups

for the Western Ontario Shoulder Instability Index (p=0.71), American Shoulder and Elbow Surgeons score (p=0.43), and active range of motion. Recurrent instability was not statistically different (ETAC, n=2; open, n=4; p=0.41). Three participants (ETAC, n=1; open, n=2) had stiff shoulders. At 2 years postoperatively, quality of life and functional outcomes between groups were not clinically different. ETAC had fewer complications and episodes of recurrence compared with open surgery. Limitations of this study include the small size of the sample population due to application of strict exclusion criteria (which resulted in a 45% intraoperative exclusion rate) and lack of long-term outcomes beyond 2 years.

Chen and colleagues (2016) conducted a meta-analysis of the peer-reviewed published literature on the surgical management of multidirectional instability of the shoulder. The available evidence included level IV, observational studies without controls (n=35) and a level II, non-randomized controlled study (n=1). Use of thermal capsular shrinkage identified a recurrent instability rate of 23.9 % (95 % confidence interval [CI], 16.6%-32.2 %) which was significantly higher than the instability rate of 9.9 % (95 % CI, 7.3%-12.9 %) in open capsular shift and 6.0 % (95 % CI, 3.7%-8.9 %) in arthroscopic capsular plication procedures, between which no difference was observed. The authors suggested that use of thermal capsular shrinkage in the treatment of multidirectional instability of the shoulder should be “avoided.”

McRae and colleagues (2016) conducted a randomized controlled trial comparing arthroscopic Bankart repair with ETAC to arthroscopic Bankart repair alone for capsular laxity in the treatment of traumatic anterior dislocation. Participants were 14 years of age or older with a diagnosis of anterior instability with a Bankart lesion confirmed on magnetic resonance imaging and had failed at least 6 months of conservative treatment. The primary outcome measure was Western Ontario Shoulder Instability Index (WOSI), represented as a percentage based on 21 questions using 100-mm visual analogue scales. Secondary outcome measures were the joint-specific functional outcome measures, American Shoulder and Elbow Surgeons Score (ASES) and the Constant Score Quality of life. Complication rates and failure rates were compared. A total of 88 participants were randomly assigned to receive arthroscopic Bankart repair with (n=44) or without ETAC (n=44). Postoperative visits occurred at 3, 6, 12, and 24 months with WOSI, ASES, and Constant scores, and rates of dislocation/subluxation. A total of 74 (84%) participants were included in the analysis; 14 participants (7 from each study group) were lost to follow-up immediately post-surgery. By 24 months, 40 of 88 (46%) participants were available for analysis of the primary endpoint. No statistically significant differences between groups at any time post-surgery were identified in WOSI, ASES, or Constant scores. Eight (22%) participants in the no-ETAC group and 7 (18%) participants in the ETAC group were considered treatment failures (odds ratio 0.77, 95 % CI, 0.25-2.38). Limitations of this study include lack of a statistically significant sample size and high loss of participants to follow-up at 3 months and 24 months post-surgery. The authors concluded there was no added benefit from ETAC as an adjunct to Bankart repair compared to repair alone for traumatic anterior instability of the shoulder.

In summary, there are a number of unresolved issues regarding the use of electrothermal shrinkage, either as a sole arthroscopic procedure, or as an adjunct to other arthroscopic repair of shoulder lesions. These issues include: 1) identifying and quantifying joint laxity; 2) optimal temperature and length of exposure to heat; 3) variable response of collagen to heat (based on the individual’s age and other factors); 4) control of tissue shrinkage (both at the time of surgery and during follow up as the acute thermal damage heals); 5) effect of potential temperature damage on sensitive nerve endings within the capsule; 6) risk of capsular ablation and neurologic complications; and, 7) appropriate rehabilitation (for example, length of immobilization during healing phase, followed by exercise) (Abrams, 2001; Gryler, 2001). Additional studies are needed to demonstrate the short- and long-term safety and effectiveness of electrothermal shrinkage for shoulder conditions, and that the procedure demonstrates equal or superior results in improving health outcomes when compared to the currently available treatment modalities.

Electrothermal Treatment for Ankle Instability

Maiotti and colleagues (2005) reported on a case series involving 22 participants with chronic lateral ankle instability who underwent arthroscopic thermal shrinkage. Even though the post-operative functional outcomes (based on the Karlsson and Peterson ankle function score) were reported as “good” or “excellent” at 42 months, with 18 of the 22 participants presenting with no evidence of ankle instability on physical exam or stress radiographs, long-term follow-up of the safety and efficacy of thermal shrinkage remains to be proven by this study. Limitations of this report include the small sample population, lack of controls, and lack of long-term outcomes.

Ventura (2021) reported the results of arthroscopic capsular shrinkage in 54 participantsout of an original group of 90 (60%) with chronic ankle instability due to isolated anterior talo-fibular ligament who were available for clinical examination after an average follow-up of 11.5 years. The mean American Orthopaedic Foot and Ankle Society (AOFAS), Karlsson–Peterson and Tegner scores significantly improved at follow-up compared to baseline measures (64.8 vs. 92.4, p<0.001; 62.5 vs. 88.8, p<0.001; and 4 vs. 6, p<0.001, respectively). Similarly, significant improvements in positive anterior drawer test were seen (100% vs. 11.1%, p< 0.001). Subsequent ankle sprains were reported in 9 participants (15.6%), 2 of whom required further surgery and 7 who were treated conservatively.

Electrothermal Treatment for Hip Instability

Philippon (2001) reviewed the use of thermal capsulorrhaphy for hip instability associated with frank dislocation or a subluxation and labral tears in a group of individuals including high-level athletes. This review, the only published article located on thermal capsulorrhaphy of the hip to date, provided conclusions on promising short-term results; however, additional study is required to determine the long-term efficacy of this procedure in the treatment of this disorder.

Electrothermal Treatment for Conditions of the Knee

Data from the published studies on anterior cruciate ligaments (ACL) instability indicates that while thermal capsulorrhaphy may initially be effective in tightening the ACL, laxity often recurs within several months. This is noted principally in individuals who have chronic laxity or have undergone ACL reconstruction. Halbrecht (2005) conducted a retrospective case series of 19 participants with partial tears of the ACL or stretched ACL grafts to evaluate the long-term results using thermal energy to treat laxity of the ACL. Short-term benefit was demonstrated at 1 year follow-up with 12 of the 14 participants (86%) with negative Lachman test results. At the 5-year follow-up, 11 of the 13 available participants went on to complete failure as confirmed by various clinical scoring examinations. The author no longer recommends this procedure for the treatment of ACL laxity, concluding that thermal capsulorrhaphy provides short-term benefit but leads to catastrophic failure in the majority of participants at long-term follow-up. Carter and colleagues (2002) reported high failure rates (at an average of 4 months) in a prospective case study of 18 participants treated for ACL laxity with thermal capsulorrhaphy. The majority of failures were in participants who had an ACL graft with or without chronic laxity prior to thermal treatment. The authors concluded further study was needed to determine if the ACL stretches out over time or is at an increased risk of reinjury in individuals with preexisting conditions.

Smith and colleagues (2008) prospectively evaluated the effectiveness of thermal shrinkage on both lax native ACL and lax reconstructions. A total of 64 participants underwent electrothermal shrinkage for a lax ACL, both native and previous reconstructions. Among the 61 participants available for follow-up past 2 years, treatment failure, defined as subsequent operations for instability or KT-1000 measurements > 5 millimeters, occurred in 31 participants (50.8%). The failure rate for lax grafts alone was 78.9% and 38.1% for lax native ligaments. The investigators concluded that electrothermal shrinkage of lax or reconstructed ACLs was “not an

appropriate treatment."

Other small case series and nonrandomized studies suggest that ACL laxity can recur within several months after thermal capsulorrhaphy, especially in individuals who have chronic laxity or have undergone ACL reconstruction. There is insufficient evidence from these studies to make a definitive conclusion regarding appropriate participant selection criteria or the safety and efficacy of the procedure. In addition, there is a lack of data regarding long-term durability or relative efficacy of thermal capsulorrhaphy compared with established therapies.

Electrothermal Treatment for Conditions of the Hand and Wrist

Thermal shrinkage has been used during arthroscopic procedures to treat carpal instability, partial-thickness cartilage defects, and as a treatment for partial scapholunate ligament tears of the wrist. Scapholunate instability is a term used to describe a wide spectrum of clinical conditions ranging from mild wrist dysfunction and partial ligamentous tear to debilitating pain with associated rupture of the scapholunate interosseus ligament complex. In a small retrospective study (n=16) with a mean follow-up period of 19 months, Darlis and colleagues (2005) suggested that scapholunate ligament debridement and thermal shrinkage effectively provided pain relief for most of the individuals who were treated for partial scapholunate ligament injuries. Stability was maintained radiographically, with no complications noted from the use of radiofrequency probes. The authors concluded, however, that these favorable short-term results should be viewed cautiously, suggesting a follow-up study of longer duration is necessary to determine the ultimate efficacy of this procedure. DeWal and colleagues (2002) acknowledged that although the initial findings of the potential benefits of thermal shrinkage for wrist instability are promising, the long-term results need to be compared with other accepted standards of medical management.

Chu and colleagues (2009) retrospectively examined whether arthroscopic electrothermal shrinkage of the volar ligaments and joint capsule could produce clinical improvement and successful functional outcomes for individuals (n=17) with thumb basal joint instability. All participants underwent regular clinical follow-up at a mean of 41 months (range, 24 to 80 months), reporting improvement in pain and thumb pinch strength in all thumbs after surgery ($p<0.01$). All participants were satisfied with the results and returned to their pre-injury activities. The authors concluded that most participants had "good subjective results" with improvement in pinch strength at 12 weeks after surgery. Flexion thumb range of motion significantly improved in all participants ($p<0.01$); however, extension did not significantly improve. Limitations of this study include the small sample size, lack of a functional testing parameter and control/comparison group (that is, individuals with laxity who had ligament reconstruction), and short-term follow-up.

Lee (2020) reported the results of a retrospective case series involving 15 participants with chronic wrist pain who underwent arthroscopic synovectomy, foveal or capsular repair, intercarpal Kirschner wires fixation, or intercarpal thermal shrinkage. It is unclear how many participants received treatment with electrothermal shrinkage. While the authors reported significant benefits with regard to average range of motion, grip strength, and pinch strength, the contribution of electrothermal shrinkage to these results cannot be ascertained.

Crespo Romero (2020) conducted a prospective case series study of 20 participants treated with arthroscopic electrothermal shrinkage for partial scapholunate ligament tears and symptomatic instability. Triangular fibrocartilage complex (TFCC) injuries were present in 14 participants. Mean follow-up was 50 months (range 29-82). The authors reported that Watson scaphoid shift test results significantly improved from 13 (65%) at baseline to 3 participants (15%) post-operatively (p-value not provided). Improvements from baseline were also reported for modified Mayo Risk Score (59 vs. 88.3, $p<0.05$) and pain ($p<0.05$).

Ricks (2021) reported on the results of a prospective case series study involving 13 participants with palmar midcarpal instability treated with arthroscopic capsular shrinkage, of which 12 were evaluated. Mean duration of pain was 5 years prior to the intervention. Instability was reported to have been completely resolved in nine wrists of 7 participants, with no deterioration in function or stability. A single subject had excellent correction of symptoms initially, but experienced mild recurrence 7 years post procedure. Four participants reported poor results. Overall, 71% of participants experienced good or excellent results. The authors attributed poor results to the coexisting conditions, including De Quervain tenosynovitis, flexor sheath ganglion, STT degeneration, and type 3 Ehlers–Danlos syndrome. Results from the disabilities of the arm, shoulder, and hand (DASH) questionnaire decreased from a mean of 34 to 12.1 at postop and 15.3 at the 12-year follow-up.

Wharton (2022) reported the results of a case series study involving 51 participants aged 8 to 18 with palmar midcarpal instability with underlying juvenile idiopathic arthritis (JIA, n=18) or congenital arthritis (non-JIA, n=33) who underwent arthroscopic synovectomy. Thermal capsular shrinkage was done in 45 cases and not done in the remaining 6 cases. Complete data were available for 45 of the 51 participants at a mean of 12 months follow-up. There was a statistically significant improvement in pain under load as measured by visual analog scale (VAS, $p=0.05$). Range of motion (ROM) was significantly better in the non-JIA group for pain at rest ($p<0.02$) and with load ($p<0.02$). A sub-analysis was done for the population with JIA plus hypermobility (n=5) vs. those with JIA and no hypermobility (n=13). A significant improvement was noted in favor of the JIA without hypermobility group with regard to extension ($p=0.007$), flexion ($p=0.011$), and radial deviation ($p=0.005$), but there was no significant difference in pain scores at rest or with load ($p=0.371$ and 0.323, respectively). No significant treatment-related adverse events were reported.

The evidence addressing electrothermal shrinkage for the treatment of wrist conditions is weak, consisting of underpowered trials involving poor methodology. Further investigation involving large well-designed and conducted controlled trials is warranted.

Summary

There is insufficient evidence in the peer-reviewed literature to demonstrate the long-term safety and efficacy of electrothermal shrinkage, alone or in combination with other arthroscopic procedures, compared to standard available treatment modalities. Clinical studies performed to date include nonrandomized studies and small, uncontrolled case series that do not allow for evaluation with a comparison group or contain insufficient follow-up periods for the determination of long-term outcomes.

Background/Overview

Description of the Condition

Joint instability can affect most major joints of the body including the ankle, hip, knee, and shoulder (glenohumeral) and the smaller joints of the hand and wrist. In particular, shoulder instability is a relatively common occurrence, affecting between 2% to 8% of the population. It is defined as excessive movement of the shoulder and results in pain with daily activities and sports activities. Shoulder instability may occur in only one direction, such as anterior, posterior, or inferior instability, or in more than one direction, referred to as multidirectional instability. There are several causes of this instability. One cause is an abnormal generalized hyperlaxity of the capsule, usually due to repetitive injury. Another cause is recurrent partial or full dislocation of the shoulder. Ligaments between the bones control how much the bones glide or bend on each other. When the joint is partially or fully dislocated, these ligaments stretch and allow excessive bone movement in relationship to each other. Other structures in the shoulder can also be torn when the shoulder dislocates.

For most individuals, shoulder instability can be treated successfully with conservative methods, such as muscle-strengthening

exercise, modification of lifestyle and work activities, and education. For individuals unresponsive to conservative shoulder treatments, arthroscopic surgical alternatives include, but are not limited to, Bankart tack, capsular shift, superior labrum anterior posterior (SLAP) lesion repair, suture anchor, or transglenoid suture procedures. Open surgical procedures include open inferior capsular shift for multidirectional shoulder instability or an open Bankart-type procedure for treatment of anterior glenohumeral instability. Electrothermal shrinkage has been introduced as a minimally invasive technique used during arthroscopic procedures to treat ligamentous laxity in the shoulder and other joints, including the ankle, hip, knee, and more recently, conditions of the hand and wrist joints. Alternatives to electrothermal shrinkage of the knee may include bracing, physical therapy, prescription drug therapy, or arthroscopic or open surgery reconstruction.

Description of Technology

The electrothermal shrinkage technique involves the application of heat using a specialized radiofrequency probe to shrink and tighten tissues. 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 body perceives this as an injury and the tissues rebuild around shorter collagen fibers, resulting in a tighter and theoretically improved joint stability.

Electrothermal shrinkage has been proposed as a technically simpler arthroscopic technique for the tightening of joint capsules, ligaments, and tendons. Although uncommon, complications do occur during or following arthroscopic procedures. Infection, phlebitis, excessive swelling or bleeding, damage to blood vessels or nerves, and instrument breakage are the most common complications, but occur in less than 1% of all arthroscopic procedures.

Definitions

Arthroscopy: A surgical procedure that involves the introduction of a thin fiberoptic scope into the joint space to allow direct visualization of an internal structure.

Capsular: Relating to any capsule; the capsular ligament is a sac surrounding the articular cavity of a freely movable joint and is attached to the bones.

Instability: Looseness, unsteadiness, or an inability to withstand normal physiologic loading without mechanical deformation.

Ligament: A band of fibrous, white tissue that connects two bones to stabilize a joint.

Osteoarthritis (OA): A deterioration of the weight bearing surface distinguished by destruction of the hyaline cartilage and narrowing at the joint space.

Tendon: A tough cord or band of dense fibrous tissue that connects a muscle to some part of a bone.

Thermal energy: Pertains to or is characterized by heat.

Coding

The following codes for treatments and procedures applicable to this document are included below for informational purposes. Inclusion or exclusion of a procedure, diagnosis or device code(s) does not constitute or imply member coverage or provider reimbursement policy. Please refer to the member's contract benefits in effect at the time of service to determine coverage or non-coverage of these services as it applies to an individual member.

When Services are Investigational and Not Medically Necessary:
When the code describes a procedure indicated in the Position Statement section as investigational and not medically necessary.

CPT

29999	Unlisted procedure, arthroscopy [when specified as thermal capsulorrhaphy of shoulder; elbow, wrist, hip, knee or ankle]

HCPCS

S2300	Arthroscopy, shoulder, surgical; with thermally-induced capsulorrhaphy

ICD-10 Diagnosis

	All diagnoses

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Document History

Status	Date	Action
Reviewed	02/15/2024	Medical Policy & Technology Assessment Committee (MPTAC) review. Revised Rationale and References sections.
Reviewed	02/16/2023	MPTAC review. Deleted Websites section.
Reviewed	02/17/2022	MPTAC review. Updated Rationale, References, and Websites section.
Reviewed	02/11/2021	MPTAC review. Updated Rationale, References, and Websites section.
Reviewed	02/20/2020	MPTAC review. Updated Websites section.
Reviewed	03/21/2019	MPTAC review. Updated References and Websites sections.
Reviewed	03/22/2018	MPTAC review. The document header wording updated from “Current Effective Date” to “Publish Date.” Updated Rationale, Background, References, and Websites sections. Removed Index section.
Reviewed	05/04/2017	MPTAC review. Updated Rationale and References sections.
Reviewed	05/05/2016	MPTAC review. Updated Rationale and References sections. Removed ICD-9 codes from Coding section.
Reviewed	05/07/2015	MPTAC review. Format changes throughout document sections. Updated Rationale and References sections.
Reviewed	05/15/2014	MPTAC review. Revisions and format changes to Rationale and Background. Updated References, Websites for Additional Information, and Index sections.
Reviewed	05/09/2013	MPTAC review. Updated Rationale, Background, References, Websites for Additional Information, and Index.
Reviewed	05/10/2012	MPTAC review. Updated Rationale, References, and Websites for Additional Information.
Reviewed	05/19/2011	MPTAC review. Updated Rationale, References, and Websites for Additional Information.
Reviewed	05/13/2010	MPTAC review. Updated Background, Coding, and References. Added section for Websites for Additional Information.
Revised	05/21/2009	MPTAC review. Revised subject title to Electrothermal Shrinkage of Joint Capsules, Ligaments, and Tendons. Revised and clarified Position Statement, adding electrothermal shrinkage as investigational and not medically necessary as a stand-alone or treatment adjunct to arthroscopic and open surgery for joint capsules, ligaments, and tendons. Updated Rationale, Background, Definitions, and References.

Reviewed	05/15/2008	MPTAC review. Clarified Position Statement. Updated Rationale and References.
	02/21/2008	The phrase "investigational/not medically necessary" was clarified to read "investigational and not medically necessary." This change was approved at the November 29, 2007 MPTAC meeting.
Reviewed	05/17/2007	MPTAC review. Rationale and References updated.
Reviewed	06/08/2006	MPTAC review. References updated.
Revised	07/14/2005	MPTAC review. Revision based on Pre-merger Anthem and Pre-merger WellPoint Harmonization.

Pre-Merger Organizations	Last Review Date	Document Number	Title
Anthem, Inc.	10/28/2004	SURG.00043	Electrothermal Capsular Shrinkage
WellPoint Health Networks, Inc.	06/24/2004	3.07.15	Thermal Treatment of Joint Capsules and Other Ligamentous Structures

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Applicable to Commercial HMO members in California: When a medical policy states a procedure or treatment is investigational, PMGs should not approve or deny the request. Instead, please fax the request to Anthem Blue Cross Grievance and Appeals at fax # 818-234-2767 or 818-234-3824. For questions, call G&A at 1-800-365-0609 and ask to speak with the Investigational Review Nurse.

Federal and State law, as well as contract language, including definitions and specific contract provisions/exclusions, take precedence over Medical Policy and must be considered first in determining eligibility for coverage. The member's contract benefits in effect on the date that services are rendered must be used. Medical Policy, which addresses medical efficacy, should be considered before utilizing medical opinion in adjudication. Medical technology is constantly evolving, and we reserve the right to review and update Medical Policy periodically.