Proximal Biceps Tendon Injury

Clinical Guidelines for Medical Necessity Review

Version: 4.0
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Important Notices

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Other Notices:

Guideline Information:

Specialty Area: Diseases & Disorders of the Musculoskeletal System (M00-M99)
CarePath Group: Shoulder
CarePath Name: Proximal Biceps Tendon Injury
Type: [**X**] Adult (18+ yo) | [_] Pediatric (0-17yo)

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Care Path Clinical Discussion

The orthopedic literature often laments that the function of the proximal biceps tendon is not fully understood.[1,2] The incidence of proximal biceps tendon injury is challenging to assess, and while it can be injured or inflamed in isolation, due to its proximity to the supraspinatus and subscapularis tendons, the proximal biceps tendon is commonly affected concomitantly with rotator cuff disease.[1,2] A recent observational study showed that 93% of patients with proximal biceps tendon rupture also had full-thickness tearing of the supraspinatus tendon.[3] Aside from rupture, which presents acutely, other pathology involving the proximal biceps tendon may present insidiously and includes tendonitis, tendinopathy, entrapment, and instability.[1,4]

Radiography is not diagnostic for proximal biceps tendon pathology. While magnetic resonance imaging (MRI) and ultrasound (US) may be helpful, they have poor sensitivity for proximal biceps tendon pathology, particularly for partial-thickness tears and instability.[5,6] As such, shoulder arthroscopy is considered the gold standard for proximal biceps tendon evaluation.[1,5] Non-surgical management includes oral medication, activity modification, and physical therapy. Ultrasound-guided injections can treat a pathologic biceps tendon except if it is subluxated or dislocated. In this case, surgical repair/tenodesis is the only option. Base the appropriateness for surgical intervention on patient age, activity level, activity demands, and preference.[1,2,6] In terms of surgical options, either tenotomy or tenodesis is acceptable as studies suggest that both are effective, and outcomes do not significantly differ.[1,2,6]

The information contained herein gives a general overview of the pathway of this specific diagnosis, beginning with the initial presentation, recommended assessments, and treatment options as supported by the medical literature. It should be noted that the care of patients with musculoskeletal injuries can be complex. The information below is meant to support clinical decision making in adult patients. It is not necessarily applicable to every case, as the entire clinical picture (including comorbidities, history, etc.) should be considered.

Key Information

- Degenerative proximal biceps tendon injuries and rupture commonly occur in older patients. In younger or middle-aged patients, biceps tendon injury is commonly associated with other shoulder pathology, so the clinician should have a high index of suspicion.

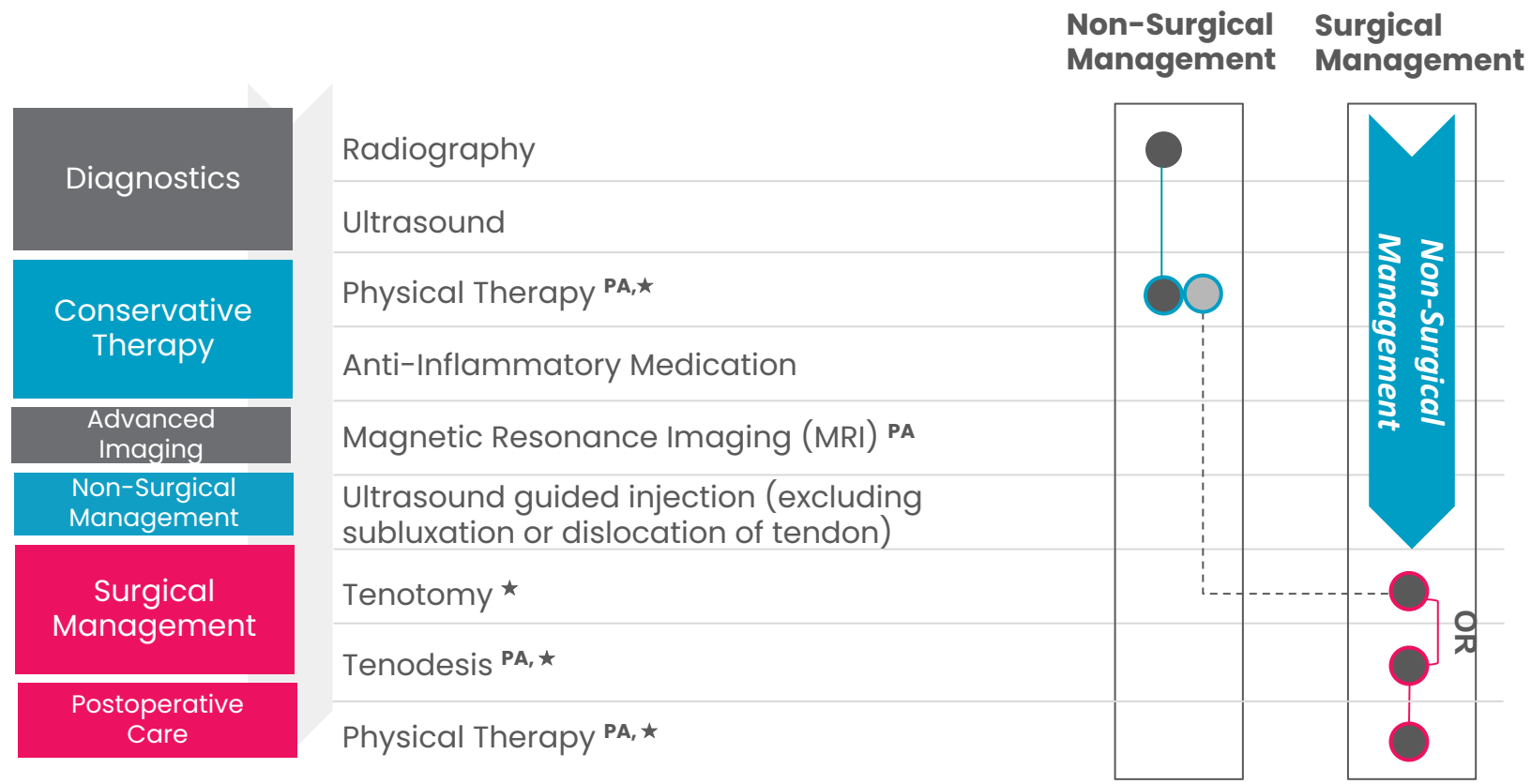
- ➢ If there is suspicion for additional shoulder pathology, such as a rotator cuff tear, MRI may be warranted.
- ➢ Proximal biceps tendon rupture is not an absolute indication for surgical intervention, especially in an older or less active population. In this setting, and with proximal biceps tendon tendinopathy, conservative management with medication, local injection, and physical therapy is appropriate.
- ➢ Refer patients for an orthopedic consultation for proximal biceps tendon ruptures when patients are active, there is concomitant rotator cuff or labral injury, or refractory cases of tendinopathy/tendinosis.

Definitions

- **Long Head of the Biceps Tendon:** attaches to the glenoid (shoulder socket).[7]
- **Short Head of the Biceps Tendon:** attaches to the coracoid process (shoulder blade).[7]

Proximal Biceps Tendon Injury

What is a "Cohere Care Path"?
These Care Paths organize the services typically considered most clinically optimal and likely to be automatically approved. These service recommendations also include the suggested sequencing and quantity or frequency determined clinically appropriate and medically necessary for the management of most patient care scenarios in this Care Path's diagnostic cohort.



Key

PA = Service may require prior authorization
★ = Denotes preferred service
AND = Services completed concurrently
OR = Services generally mutually exclusive

= Non-surgical management prior authorization group of services
= Surgical management prior authorization group of services
= Subsequent service
= Management path moves to a different management path

CarePath Diagnostic Criteria

Disease Classification

Biceps Tendon Injury

ICD-10 Codes Associated with Classification

ICD-10 Code	Code Description/Definition
M25.511	Pain in right shoulder
M25.512	Pain in left shoulder
M25.519	Pain in unspecified shoulder
M62.10	Other rupture of muscle (nontraumatic), unspecified site
M62.111	Other rupture of muscle (nontraumatic), right shoulder
M62.112	Other rupture of muscle (nontraumatic), left shoulder
M62.119	Other rupture of muscle (nontraumatic), unspecified shoulder
M62.121	Other rupture of muscle (nontraumatic), right upper arm
M62.122	Other rupture of muscle (nontraumatic), left upper arm
M66.211	Spontaneous rupture of extensor tendons, right shoulder
M66.212	Spontaneous rupture of extensor tendons, left shoulder
M66.219	Spontaneous rupture of extensor tendons, unspecified shoulder
M66.311	Spontaneous rupture of flexor tendons, right shoulder
M66.312	Spontaneous rupture of flexor tendons, left shoulder
M66.319	Spontaneous rupture of flexor tendons, unspecified shoulder
M66.811	Spontaneous rupture of other tendons, right shoulder
M66.812	Spontaneous rupture of other tendons, left shoulder
M66.819	Spontaneous rupture of other tendons, unspecified shoulder

M67.911	Unspecified disorder of synovium and tendon, right shoulder
M67.912	Unspecified disorder of synovium and tendon, left shoulder
M67.919	Unspecified disorder of synovium and tendon, unspecified shoulder
M75.20	Bicipital tendinitis, unspecified shoulder
M75.21	Bicipital tendinitis, right shoulder
M75.22	Bicipital tendinitis, left shoulder
M79.601	Pain in right arm
M79.602	Pain in left arm
M79.603	Pain in arm, unspecified
M79.621	Pain in right upper arm
M79.622	Pain in left upper arm
M79.629	Pain in unspecified upper arm
S46.1	Injury of muscle, fascia and tendon of long head of biceps
S46.10	Unspecified injury of muscle, fascia and tendon of long head of biceps
S46.101	Unspecified injury of muscle, fascia and tendon of long head of biceps, right arm
S46.102	Unspecified injury of muscle, fascia and tendon of long head of biceps, left arm
S46.109	Unspecified injury of muscle, fascia and tendon of long head of biceps, unspecified arm
S46.11	Strain of muscle, fascia and tendon of long head of biceps
S46.111	Strain of muscle, fascia and tendon of long head of biceps, right arm
S46.112	Strain of muscle, fascia and tendon of long head of biceps, left arm
S46.119	Strain of muscle, fascia and tendon of long head of biceps, unspecified arm
S46.12	Laceration of muscle, fascia and tendon of long head of bicep

S46.121	Laceration of muscle, fascia and tendon of long head of biceps, right arm
S46.122	Laceration of muscle, fascia and tendon of long head of biceps, left arm
S46.129	Laceration of muscle, fascia and tendon of long head of biceps, unspecified arm
S46.19	Other injury of muscle, fascia and tendon of long head of biceps
S46.191	Other injury of muscle, fascia and tendon of long head of biceps, right arm
S46.192	Other injury of muscle, fascia and tendon of long head of biceps, left arm
S46.199	Other injury of muscle, fascia and tendon of long head of biceps, unspecified arm
S46.2	Injury of muscle, fascia and tendon of other parts of biceps
S46.20	Unspecified injury of muscle, fascia and tendon of other parts of biceps
S46.201	Unspecified injury of muscle, fascia and tendon of other parts of biceps, right arm
S46.202	Unspecified injury of muscle, fascia and tendon of other parts of biceps, left arm
S46.209	Unspecified injury of muscle, fascia and tendon of other parts of biceps, unspecified arm
S46.21	Strain of muscle, fascia and tendon of other parts of biceps
S46.211	Strain of muscle, fascia and tendon of other parts of biceps, right arm
S46.212	Strain of muscle, fascia and tendon of other parts of biceps, left arm
S46.219	Strain of muscle, fascia and tendon of other parts of biceps, unspecified arm
S46.22	Laceration of muscle, fascia and tendon of other parts of biceps

S46.221	Laceration of muscle, fascia and tendon of other parts of biceps, right arm
S46.222	Laceration of muscle, fascia and tendon of other parts of biceps, left arm
S46.229	Laceration of muscle, fascia and tendon of other parts of biceps, unspecified arm
S46.29	Other injury of muscle, fascia and tendon of other parts of biceps
S46.291	Other injury of muscle, fascia and tendon of other parts of biceps, right arm
S46.292	Other injury of muscle, fascia and tendon of other parts of biceps, left arm
S46.299	Other injury of muscle, fascia and tendon of other parts of biceps, unspecified arm

Presentation and Etiology

Causes and Risk Factors

Injuries of the proximal biceps tendon are often associated with concomitant shoulder pathologies, such as rotator cuff disease or dysfunction, scapular dysfunction, labral lesions, and glenohumeral arthritis.[2,4]

Clinical Presentation

The presentation may vary depending on concomitant shoulder conditions but may include:[2,4]

- Anterior shoulder pain that may radiate distally
- Exacerbating factors:
    - Overhead activity
    - Activities requiring elbow flexion, including lifting and pulling
- Snapping or locking sensation (entrapment or instability)
- Pain with throwing overhead

Tendon rupture presentation may include:[1,2]

- Acute onset
- Biceps cramping
- The patient heard or felt a snap or pop.

Typical Physical Exam Findings

Examination findings may include but are not limited to:[1,2,4]

- Tenderness when palpating the tendon at the bicipital groove
- Reproducible click and subluxation of tendon out of the groove with instability
- Tendon rupture:
    - Swelling
    - Ecchymosis
    - Popeye deformity (a focal bulge at the muscle belly)
- Special testing:
    - Provocative maneuvers are limited by poor sensitivity
    - Speed:
        - Reproduction of pain with resisted forward flexion of the shoulder with arm extended and supinated
    - Yergason's test:

        - Reproduction of pain with resisted pronation while arm abducted and elbow flexed
    - Uppercut test:
        - Elbow is flexed at 90°, resistant shoulder flexion (supination)

Typical Diagnostic Findings

- Radiograph is normal
- Spurring in the intertubercular groove

CarePath Services & Medical Necessity Criteria

Conservative Therapy

Service: Physical Therapy

General Guidelines

- **Units, Frequency, & Duration:**
  - There is insufficient evidence to support recommendations.
  - Physical therapy duration depends on the amount of time required to achieve a full pain-free range of motion (ROM) and pain-free completion of exercises.
    - Shoulder rehabilitation programs usually require 8-12 weeks.[8]
- **Criteria for Subsequent Requests:**
  - Recurrent or persistent pain or disability
- **Recommended Clinical Approach:**
  - There is insufficient evidence to guide recommendations for managing biceps tendinopathy.
  - Physical therapy is recommended to address ROM at the shoulder and elbow, scapular dysfunction, or other biomechanical abnormalities.[4,9]
  - Useful adjuncts may include ultrasound, dry needling, and kinesiotaping.[9]
- **Exclusions:** None.

Medical Necessity Criteria

Indications

➔ **Physical therapy** is considered appropriate if **ANY** of the following is **TRUE**:

- The patient has **ALL** of the following:
  - The patient has **ANY** positive findings from the presentation list:
    - Anterior shoulder pain that may radiate distally
    - Exacerbating factors:
      - Overhead activity

            - Activities requiring elbow flexion, including lifting and pulling
        - Snapping or locking sensation (entrapment or instability)
        - Acute onset
        - Biceps cramping
        - The patient heard or felt a snap or pop.
    - The patient has **ANY** positive findings from the physical exam list:
        - Tenderness when palpating the tendon at the bicipital groove
        - Reproducible click and subluxation of tendon out of the groove with instability
        - Tendon rupture:
            - Swelling
            - Ecchymosis
            - Popeye deformity (a focal bulge at the muscle belly)
        - Special testing:
            - Provocative maneuvers are limited by poor sensitivity
            - Speed:
                - Reproduction of pain with resisted forward flexion of the shoulder with arm extended and supinated
            - Yergason's test:
                - Reproduction of pain with resisted pronation while arm abducted and elbow flexed
            - Uppercut test:
                - Elbow is flexed at 90°, resistant shoulder flexion (supination)
- The patient has a complete proximal biceps tendon rupture and wishes to avoid surgery.[9]

Non-Indications

None.

Site of Service Criteria

Outpatient

Procedure Codes (HCPCS/CPT)

HCPCS Code	Code Description/Definition
97010	Application of hot or cold packs
97012	Application of mechanical traction
97014	Application of electrical stimulation
97016	Application of vasopneumatic devices
97018	Application of paraffin bath
97022	Application of whirlpool
97024	Application of diathermy
97026	Application of infrared modality
97028	Application of ultraviolet modality
97032	Application of manual electrical stimulation
97033	Application of iontophoresis
97034	Application of contrast baths
97035	Application of ultrasound modality
97036	Application of Hubbard tank
97039	Modality service
97110*	Therapeutic exercises to develop strength and endurance, range of motion and flexibility
97112	Neuromuscular reeducation of movement, balance, coordination, kinesthetic sense, posture, and proprioception for sitting and standing activities
97113	Aquatic therapy with therapeutic exercises
97116	Gait training including stair climbing

97124	Massage including effleurage and petrissage; Massage including effleurage and tapotement; Massage including effleurage, petrissage and tapotement; Massage including petrissage and tapotement
97139	Therapeutic procedure
97140	Manual therapy techniques
97150	Group therapeutic procedures
97164	Physical therapy re-evaluation of established plan of care, high complexity, typical time with patient 20 minutes; Physical therapy re-evaluation of established plan of care, high complexity, typical time with patient and family 20 minutes; Physical therapy re-evaluation of established plan of care, high complexity, typical time with patient's family 20 minutes
97530	Direct therapeutic activities with use of dynamic activities to improve functional performance, each 15 minutes
97535	Home management training, direct one-on-one contact, each 15 minutes; Self-care management training, direct one-on-one contact, each 15 minutes
97537	Community reintegration training, direct one-on-one contact, each 15 minutes; Work reintegration training, direct one-on-one contact, each 15 minutes
97542	Wheelchair management, each 15 minutes
97545	Work conditioning, initial 2 hours; Work hardening, initial 2 hours
97546	Work conditioning, each additional hour; Work hardening, each additional hour
97750	Physical performance measurement with written report, each 15 minutes; Physical performance test with written report, each 15 minutes
97755	Assistive technology assessment with written report, direct one-on-one contact, each 15 minutes

97760	Initial orthotic management and training with assessment and fitting of lower extremities and trunk, each 15 minutes; Initial orthotic management and training with assessment and fitting of lower extremities, each 15 minutes; Initial orthotic management and training with assessment and fitting of lower extremity and trunk, each 15 minutes; Initial orthotic management and training with assessment and fitting of lower extremity, each 15 minutes; Initial orthotic management and training with assessment and fitting of trunk, each 15 minutes; Initial orthotic management and training with assessment and fitting of upper and lower extremities and trunk, each 15 minutes
97761	Initial prosthetic training of lower extremities, each 15 minutes; Initial prosthetic training of lower extremity, each 15 minutes Initial prosthetic training of upper and lower extremities, each 15 minutes; Initial prosthetic training of upper extremities, each 15 minutes; Initial prosthetic training of upper extremity, each 15 minutes
97763	Subsequent orthotic management and training of lower extremities and trunk, each 15 minutes Subsequent orthotic management and training of lower extremity and trunk, each 15 minutes Subsequent orthotic management and training of lower extremity, each 15 minutes Subsequent orthotic management and training of upper and lower extremities and trunk, each 15 minutes Subsequent orthotic management and training of upper extremities and trunk, each 15 minutes Subsequent orthotic management and training of upper extremities, each 15 minutes Subsequent orthotic management and training of upper extremity and trunk, each 15 minutes Subsequent orthotic management and training of upper extremity, each 15 minutes Subsequent orthotic management of lower extremities and

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97799	Unlisted physical medicine/rehabilitation service or procedure
420	Physical Therapy
421	Physical Therapy: Visit Charge
422	Physical Therapy: Hourly Charge
423	Physical Therapy: Group Rate
424	Physical Therapy: Evaluation/Re-evaluation
429	Physical Therapy: Other Physical Therapy
97163	Evaluation of physical therapy, typically 45 minutes
97161	Evaluation of physical therapy, typically 20 minutes
97162	Evaluation of physical therapy, typically 30 minutes
97168	Re-evaluation of occupational therapy established plan of care, typically 30 minutes
97165	Evaluation of occupational therapy, typically 30 minutes
97166	Evaluation of occupational therapy, typically 45 minutes
97167	Evaluation of occupational therapy established plan of care, typically 60 minutes
G0151	Hhcp-serv of pt,ea 15 min

*Default codes for suggested services

Advanced Imaging

Service: Magnetic Resonance Imaging (MRI)

General Guidelines

- **Units, Frequency, & Duration:** None.
- **Criteria for Subsequent Requests:** None.
- **Recommended Clinical Approach:**
  - MRI has poor sensitivity for proximal biceps tendon pathology, but concomitant shoulder pathology may raise clinical suspicion.[5]
  - MRI may be necessary for identifying other shoulder pathology, for when the clinical picture is unclear, or for surgical planning.[6]
- **Exclusions:** None.

Medical Necessity Criteria

Indications

➔ **MRI** is considered appropriate if **ANY** of the following is **TRUE**[10]:

- ◆ Persistent pain for more than 6 weeks despite conservative management (e.g., physical therapy)
- ◆ The patient has painful mechanical symptoms

Non-Indications

➔ **MRI** may not be appropriate if **ANY** of the following is **TRUE**[11]**:**

- ◆ Non-compatible implanted devices
- ◆ Metallic intraocular foreign bodies
- ◆ Claustrophobia

Site of Service Criteria

Outpatient

Procedure Codes (HCPCS/CPT)

HCPCS Code	Code Description/Definition
73218	Magnetic resonance imaging (MRI) of upper arm between shoulder and elbow without contrast material
73219	Magnetic resonance imaging (MRI) of upper arm between shoulder and elbow with contrast material

73220	Magnetic resonance imaging (MRI) of upper arm between shoulder and elbow without contrast material, followed by contrast material and further sequences
73221	Magnetic resonance imaging (MRI) of glenohumeral joint without contrast material
73222	Magnetic resonance imaging (MRI) of glenohumeral joint with contrast material
73223	Magnetic resonance imaging (MRI) of glenohumeral joint without contrast material, followed by contrast material and further sequences

Surgical Management

Service: Tenotomy

General Guidelines

- **Units, Frequency, & Duration:** None.
- **Criteria for Subsequent Requests:** None.
- **Recommended Clinical Approach:**
  - There is no consensus regarding choosing a tenotomy or a tenodesis for proximal biceps tendon pathology with or without rotator cuff tear.[1,2,6]
  - Choose the appropriate procedure based on the patient's functional requirements and age as well as the surgeon's discretion.[2]
- **Exclusions:** None.

Medical Necessity Criteria

Indications

➔ **Tenotomy** is considered appropriate if **ANY** of the following is **TRUE**[1,2,9]:

- ◆ The patient has **ANY** of the following diagnoses:
  - Persistent pain or disability despite conservative treatment
  - Proximal biceps tendon pathology and is undergoing rotator cuff repair.
  - Partial-thickness proximal biceps tendon tear 25%-50%
  - Medial proximal biceps tendon subluxation
  - Proximal biceps tendon subluxation in the setting of a subscapularis tendon tear or a biceps pulley/sling
  - Hypertrophy of proximal biceps tendon noted on imaging ("hourglass")
  - Failed superior labrum anterior and posterior (SLAP) repair
- ◆ Biceps tenosynovitis in a patient over 60 years old with low activity demands and minimal concerns about the cosmetic outcome.
- ◆ The patient cannot comply with tenodesis postoperative restrictions and rehabilitation requirements.

Non-Indications

- ➔ **Tenotomy** is not considered appropriate for patients with **ANY** of the following is **TRUE**[1,2,9]:
  - ◆ High activity demands or athletic requirements
  - ◆ Concerns about the cosmetic outcome

Site of Service Criteria

Outpatient

Procedure Codes (HCPCS/CPT)

HCPCS Code	Code Description/Definition
23405	Tenotomy of single tendon of shoulder area
24310	Open tenotomy of each tendon between elbow and shoulder

Service: Tenodesis

General Guidelines

- **Units, Frequency, & Duration:** None.
- **Criteria for Subsequent Requests:** None.
- **Recommended Clinical Approach:**
  - There is no consensus regarding choosing a tenotomy or a tenodesis for proximal biceps tendon pathology with or without rotator cuff tear.[1,2,6]
  - Choose the appropriate procedure based on the patient's functional requirements and age as well as the surgeon's discretion.[2]
  - It may be performed open or arthroscopically.
- **Exclusions:** None.

Medical Necessity Criteria

Indications

➔ **Tenodesis** is considered appropriate if **ANY** of the following is **TRUE**:[1,9]

- Persistent pain or disability despite conservative treatment
- Proximal biceps tendon pathology and is undergoing rotator cuff repair.
- Partial-thickness proximal biceps tendon tear 25%-50%
- Medial proximal biceps tendon subluxation
- Proximal biceps tendon subluxation in the setting of a subscapularis tendon tear or a biceps pulley/sling
- Hypertrophy of proximal biceps tendon noted on imaging ("hourglass")
- Failed superior labrum anterior and posterior (SLAP) repair
- Persistent biceps tenosynovitis

Non-Indications

➔ **Tenodesis** is not considered appropriate for patients with **ANY** of the following:

- The patient cannot comply with postoperative restrictions and rehabilitation requirements.[1,2]

Site of Service Criteria

None.

Procedure Codes (HCPCS/CPT)

HCPCS Code	Code Description/Definition
23430	Tenodesis of long head of biceps muscle
29828	Arthroscopy shoulder biceps tenodesis
29805	Diagnostic examination of shoulder using an endoscope
S2300	Arthroscopy, shoulder, surgi
24340	Anchoring or biceps tendon at elbow
23440	Transplantation of biceps tendon

Surgical Risk Factors

Patient Medical Risk Stratification

Patient Risk Score	Patient Characteristic	Min Range	Max Range	Guidance
1- Very Low Risk	No known medical problems			
2- Low Risk	Hypertension		180/110 mm Hg	
2- Low Risk	Asthma	peak flow >80% of predicted or personal best value		
2- Low Risk	Prior history of alcohol abuse			Screen for liver disease and malnutrition
2- Low Risk	Prior history of tobacco use			
3- Intermediate Risk	Asthma	peak flow <80% of predicted or personal best value		
3- Intermediate Risk	Active alcohol abuse			
3- Intermediate Risk	Age	65	75	
3- Intermediate Risk	History of treated, stable coronary artery disease (CAD)			
3- Intermediate Risk	Stable atrial fibrillation			
3- Intermediate Risk	Diabetes mellitus	HbA1C >7%		
3- Intermediate Risk	Morbid obesity	BMI 30	BMI 40	
3- Intermediate Risk	Anemia	hemoglobin <11 (females), <12 (males)		Workup to identify etiology
3- Intermediate Risk	HIV	CD4 <200 cells/mm3		Get clearance from HIV specialist

3- Intermediate Risk	Rheumatologic disease			Preoperative consultation with rheumatologist re: perioperative medication management
3- Intermediate Risk	Peripheral vascular disease or history of peripheral vascular bypass	ankle-brachial pressure index (ABPI) <0.9		Preoperative consultation with vascular surgeon
3- Intermediate Risk	History of venous thromboembolism (VTE)			
3- Intermediate Risk	Well-controlled obstructive sleep apnea			
3- Intermediate Risk	Malnutrition	transferrin <200 mg/dL albumin <3.5 g/dL prealbumin <22.5 mg/dL total lymphocyte count <1200-1500 cell/mm3 BMI <18		Preoperative consultation with nutritionist
3- Intermediate Risk	Active tobacco Use			Enroll patient in smoking cessation program
4- High Risk	Diabetes mellitus with complications	HbA1c >8%		
4- High Risk	Age	76	85	
4- High Risk	Oxygen dependent pulmonary disease			
4- High Risk	Sickle cell anemia			
4- High Risk	Obesity	BMI 40		
4- High Risk	Cirrhosis, history of hepatic decompensation or variceal bleeding			

4- High Risk	Impaired cognition; dementia			
4- High Risk	Compensated CHF			
4- High Risk	Cerebrovascular disease			
4- High Risk	Uncontrolled or suspected obstructive sleep apnea (OSA)			
4- High Risk	Renal insufficiency	serum creatinine >1.5 mg/dL or creatinine clearance <100 mL/min		
4- High Risk	Opioid dependence			
4- High Risk	End Stage Liver Disease			
4- High Risk	Uncontrolled Seizure Disorder			
4- High Risk	History of Malignant Hyperthermia			
5- Very High Risk	Cardiovascular: unstable angina, recent myocardial infarction (60 days), uncontrolled atrial fibrillation or other high-grade abnormal rhythm, severe valvular disease, decompensated heart failure			
5- Very High Risk	Primary pulmonary hypertension			Preoperative consultation with pulmonologist warranted
5- Very High Risk	Cirrhosis or severe liver disease, history of hepatic decompensation or variceal bleeding			
5- Very High Risk	Severe frailty, dependence for ADLs, or history of 3 or more falls in last 6 mos			
5- Very High Risk	Obesity		BMI >50	
5- Very High Risk	Age		>85	

5- Very High Risk	History of VTE with CI to anticoagulation, failure of anticoagulation, cessation of anticoagulation therapy secondary to bleeding			Preoperative consultation with hematologist or internist
5- Very High Risk	Renal failure requiring dialysis			
5- Very High Risk	Immunosuppression			
5- Very High Risk	Chronic Pain			

Postoperative Care

Service: Physical Therapy

General Guidelines

- **Units, Frequency, & Duration:** None.
  - Insufficient evidence to recommend units, frequency, duration
  - Duration likely up to 3 months
- **Criteria for Subsequent Requests:** None.
- **Recommended Clinical Approach[10]:**
  - Other repairs (if applicable) dictate the rehab protocol.
  - An initial period of immobilization followed by mobilization and strengthening
  - Do not begin resistance exercises until approximately week 6.
- **Exclusions:** None.

Medical Necessity Criteria

Indications

➔ **Physical therapy** is considered appropriate if **ALL** of the following are **TRUE**[10]:

◆ The patient underwent biceps tenodesis or tenotomy.

Non-Indications

None

Site of Service Criteria

Outpatient

Procedure Codes (HCPCS/CPT)

HCPCS Code	Code Description/Definition
97010	Application of hot or cold packs
97012	Application of mechanical traction
97014	Application of electrical stimulation
97016	Application of vasopneumatic devices
97018	Application of paraffin bath

97022	Application of whirlpool
97024	Application of diathermy
97026	Application of infrared modality
97028	Application of ultraviolet modality
97032	Application of manual electrical stimulation
97033	Application of iontophoresis
97034	Application of contrast baths
97035	Application of ultrasound modality
97036	Application of Hubbard tank
97039	Modality service
97110*	Therapeutic exercises to develop strength and endurance, range of motion and flexibility
97112	Neuromuscular reeducation of movement, balance, coordination, kinesthetic sense, posture, and proprioception for sitting and standing activities
97113	Aquatic therapy with therapeutic exercises
97116	Gait training including stair climbing
97124	Massage including effleurage and petrissage; Massage including effleurage and tapotement; Massage including effleurage, petrissage and tapotement; Massage including petrissage and tapotement
97139	Therapeutic procedure
97140	Manual therapy techniques
97150	Group therapeutic procedures
97164	Physical therapy re-evaluation of established plan of care, high complexity, typical time with patient 20 minutes; Physical therapy re-evaluation of established plan of care, high complexity, typical time with patient and family 20 minutes; Physical therapy re-evaluation of established plan of care,

	high complexity, typical time with patient's family 20 minutes
97530	Direct therapeutic activities with use of dynamic activities to improve functional performance, each 15 minutes
97535	Home management training, direct one-on-one contact, each 15 minutes; Self-care management training, direct one-on-one contact, each 15 minutes
97537	Community reintegration training, direct one-on-one contact, each 15 minutes; Work reintegration training, direct one-on-one contact, each 15 minutes
97542	Wheelchair management, each 15 minutes
97545	Work conditioning, initial 2 hours; Work hardening, initial 2 hours
97546	Work conditioning, each additional hour; Work hardening, each additional hour
97750	Physical performance measurement with written report, each 15 minutes; Physical performance test with written report, each 15 minutes
97755	Assistive technology assessment with written report, direct one-on-one contact, each 15 minutes
97760	Initial orthotic management and training with assessment and fitting of lower extremities and trunk, each 15 minutes; Initial orthotic management and training with assessment and fitting of lower extremities, each 15 minutes; Initial orthotic management and training with assessment and fitting of lower extremity and trunk, each 15 minutes; Initial orthotic management and training with assessment and fitting of lower extremity, each 15 minutes; Initial orthotic management and training with assessment and fitting of trunk, each 15 minutes; Initial orthotic management and training with assessment and fitting of upper and lower extremities and trunk, each 15 minutes
97761	Initial prosthetic training of lower extremities, each 15

	minutes; Initial prosthetic training of lower extremity, each 15 minutes Initial prosthetic training of upper and lower extremities, each 15 minutes; Initial prosthetic training of upper extremities, each 15 minutes; Initial prosthetic training of upper extremity, each 15 minutes
97763	Subsequent orthotic management and training of lower extremities and trunk, each 15 minutes Subsequent orthotic management and training of lower extremity and trunk, each 15 minutes Subsequent orthotic management and training of lower extremity, each 15 minutes Subsequent orthotic management and training of upper and lower extremities and trunk, each 15 minutes Subsequent orthotic management and training of upper extremities and trunk, each 15 minutes Subsequent orthotic management and training of upper extremities, each 15 minutes Subsequent orthotic management and training of upper extremity and trunk, each 15 minutes Subsequent orthotic management and training of upper extremity, each 15 minutes Subsequent orthotic management of lower extremities and trunk, each 15 minutes Subsequent orthotic management of lower extremity and trunk, each 15 minutes Subsequent orthotic management of lower extremity, each 15 minutes Subsequent orthotic management of upper and lower extremities and trunk, each 15 minutes Subsequent orthotic management of upper extremities and trunk, each 15 minutes Subsequent orthotic management of upper extremities, each 15 minutes Subsequent orthotic management of upper extremity and trunk, each 15 minutes

	Subsequent orthotic management of upper extremity, each 15 minutes Subsequent orthotic training of lower extremity, each 15 minutes Subsequent orthotic training of upper and lower extremities and trunk, each 15 minutes Subsequent orthotic training of upper extremities and trunk, each 15 minutes Subsequent orthotic training of upper extremities, each 15 minutes Subsequent orthotic training of upper extremity and trunk, each 15 minutes Subsequent orthotic training of upper extremity, each 15 minutes Subsequent prosthetic management and training of lower extremities and trunk, each 15 minutes Subsequent prosthetic management and training of lower extremity and trunk, each 15 minutes Subsequent prosthetic management and training of lower extremity, each 15 minutes Subsequent prosthetic management and training of upper and lower extremities and trunk, each 15 minutes Subsequent prosthetic management and training of upper extremities and trunk, each 15 minutes Subsequent prosthetic management and training of upper extremities, each 15 minutes Subsequent prosthetic management and training of upper extremity and trunk, each 15 minutes Subsequent prosthetic management and training of upper extremity, each 15 minutes Subsequent prosthetic management of lower extremities and trunk, each 15 minutes Subsequent prosthetic management of lower extremity and trunk, each 15 minutes Subsequent prosthetic management of lower extremity, each 15 minutes Subsequent prosthetic management of upper and lower extremities and trunk, each 15 minutes

	Subsequent prosthetic management of upper extremities and trunk, each 15 minutes Subsequent prosthetic management of upper extremities, each 15 minutes Subsequent prosthetic management of upper extremity and trunk, each 15 minutes Subsequent prosthetic management of upper extremity, each 15 minutes Subsequent prosthetic training of lower extremity, each 15 minutes Subsequent prosthetic training of upper and lower extremities and trunk, each 15 minutes Subsequent prosthetic training of upper extremities and trunk, each 15 minutes Subsequent prosthetic training of upper extremities, each 15 minutes Subsequent prosthetic training of upper extremity and trunk, each 15 minutes Subsequent prosthetic training of upper extremity, each 15 minutes Subsequent orthotic management and training of lower extremities, each 15 minutes Subsequent orthotic management of lower extremities, each 15 minutes Subsequent orthotic training of lower extremities and trunk, each 15 minutes Subsequent orthotic training of lower extremities, each 15 minutes Subsequent orthotic training of lower extremity and trunk, each 15 minutes Subsequent prosthetic management and training of lower extremities, each 15 minutes Subsequent prosthetic management of lower extremities, each 15 minutes Subsequent prosthetic training of lower extremities and trunk, each 15 minutes Subsequent prosthetic training of lower extremities, each 15 minutes

	Subsequent prosthetic training of lower extremity and trunk, each 15 minutes
97799	Unlisted physical medicine/rehabilitation service or procedure
420	Physical Therapy
421	Physical Therapy: Visit Charge
422	Physical Therapy: Hourly Charge
423	Physical Therapy: Group Rate
424	Physical Therapy: Evaluation/Re-evaluation
429	Physical Therapy: Other Physical Therapy
97163	Evaluation of physical therapy, typically 45 minutes
97161	Evaluation of physical therapy, typically 20 minutes
97162	Evaluation of physical therapy, typically 30 minutes
97168	Re-evaluation of occupational therapy established plan of care, typically 30 minutes
97165	Evaluation of occupational therapy, typically 30 minutes
97166	Evaluation of occupational therapy, typically 45 minutes
97167	Evaluation of occupational therapy established plan of care, typically 60 minutes
G0151	Hhcp-serv of pt,ea 15 min

*Default codes for suggested services

References

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11. American College of Radiology. ACR Practice Parameter for Performing and Interpreting Magnetic Resonance Imaging (MRI). ACR.org. Revised 2022.

Clinical Guideline Revision History/Information

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Review History	
September 16, 2020 (V.2)	Approving Physician: Dr. Brian Covino
November 15th, 2021 (V.3)	Reviewing Physician: Dr. Scott Duncan Approving Physician: Dr. Brian Covino
December 29, 2022 (V.4)	Reviewing Physician: Dr. Edwin Spencer Approving Physician: Dr. Traci Granston