

**DRAFT Medical Coverage Policy | Suture Button Suspensionplasty Fixation System for Thumb Carpometacarpal Osteoarthritis**



**EFFECTIVE DATE:** 05|01|2024

**POLICY LAST REVIEWED:** 01|03|2024

## OVERVIEW

In the thumb, the most common site for arthritis to develop is in the joint at the base of the thumb, also known as the carpometacarpal (CMC) joint. Pain and functional limitations associated with symptomatic thumb CMC joint osteoarthritis, especially when pinching or gripping objects, can significantly interfere with quality of life. Surgery is indicated when conservative measures fail to provide sufficient relief and functional improvement. There is currently no consensus on the optimal surgical approach, but the most frequently used procedure is trapeziectomy with ligament reconstruction and tendon interposition (LRTI). Trapeziectomy using suture button suspensionplasty (SBS) is proposed as a less invasive alternative to trapeziectomy with LRTI.

## MEDICAL CRITERIA

Not applicable

## PRIOR AUTHORIZATION

Not applicable

## POLICY STATEMENT

### Medicare Advantage Plans

The use of suture button suspensionplasty fixation system for thumb carpometacarpal osteoarthritis not covered as the evidence is insufficient to determine the effects of the technology on health outcomes.

### Commercial Products

The use of suspensionplasty fixation system for thumb carpometacarpal osteoarthritis not medically necessary as the evidence is insufficient to determine the effects of the technology on health outcomes.

## COVERAGE

Benefits may vary between groups and contracts. Please refer to the appropriate Benefit Booklet, Evidence of Coverage or Subscriber Agreement for applicable not medically necessary/not covered benefits/coverage.

## BACKGROUND

In the thumb, the most common site for arthritis to develop is in the joint at the base of the thumb, also known as the carpometacarpal (CMC) joint. The incidence of CMC joint osteoarthritis is estimated to be 5% to 33% among adults in their 50s and 60s and rises with age. It is more common in postmenopausal women. Pain and functional limitations, especially when pinching or gripping objects, can significantly interfere with quality of life.

First-line treatment of CMC joint osteoarthritis includes non-surgical measures such as activity modifications, rest, hand orthosis, anti-inflammatory medications, physical therapy, and corticosteroid injections. Surgery is indicated when conservative treatment fails to provide sufficient relief and functional improvement. Although thumb CMC joint osteoarthritis is often staged using radiological classification systems (e.g., the Eaton-Littler classification), the severity of symptoms does not necessarily correspond to radiographic findings; therefore a decision to proceed to surgery is based on symptoms and degree of disability.

Multiple surgical techniques to treat thumb CMC osteoarthritis have been developed but there is currently no consensus on the optimal approach. The most common surgical technique is removal of the trapezium bone at the base of the thumb (trapeziectomy). Trapeziectomy can be performed alone but is most commonly performed in conjunction with reconstruction of the ligament that holds the bones between the thumb and

index finger together, and filling the space left behind by the removed trapezium with tendon harvested from the forearm to support the thumb. This procedure is known as trapeziectomy with ligament reconstruction and tendon interposition (LRTI). Either the flexor carpi radialis (FCR) tendon or abductor pollicis longus (APL) tendon is used in this procedure.

Trapeziectomy using suture button suspensionplasty is proposed as a less invasive alternative to trapeziectomy with LRTI. Instead of using tendon to support the thumb, the procedure suspends the first metacarpal to the second using a strong suture material (fiberwire) passed through both bones. A button on each of the metacarpals is attached to either end of the suture to secure the bones in the correct position.

In 2014, the CMC Mini TightRope System (Arthrex, Inc) was FDA cleared through the 510K process. Clearance was based on a determination that the device is substantially equivalent to the predicate device Arthrex Implant System (Mini TightRope). The CMC Mini TightRope system is indicated for CMC joint arthroplasty as an adjunct in the suspension of the thumb metacarpal by providing stabilization at the base of the first and second metacarpal when the trapezium has been excised due to osteoarthritis.

## **CODING**

### **Medicare Advantage Plans and Commercial Products**

There is not a specific code(s) for this service. Claims must be filed with the following unlisted code(s):

**26989** Unlisted procedure hands, or fingers

## **RELATED POLICIES**

Unlisted Procedures

## **PUBLISHED**

Provider Update, March 2024

## **REFERENCES**

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