# **Medical Coverage Policy** | Surgery for Groin Pain in Athletes



**EFFECTIVE DATE:** 04 | 07 | 2015

POLICY LAST UPDATED: 03 | 17 | 2021

#### **OVERVIEW**

Sports-related groin pain, commonly known as athletic pubalgia or sports hernia, is characterized by disabling activity-dependent lower abdominal and groin pain that is not attributable to any other cause. Athletic pubalgia is most frequently diagnosed in high-performance male athletes, particularly those who participate in sports that involve rapid twisting and turning such as soccer, hockey, and football. For patients who fail conservative therapy, surgical repair of any defects identified in the muscles, tendons or nerves has been proposed.

### **MEDICAL CRITERIA**

Not applicable

#### PRIOR AUTHORIZATION

Not applicable

## **POLICY STATEMENT**

## Medicare Advantage Plans

Surgical treatment of athletic pubalgia groin pain in athletes (also known as athletic pubalgia, Gilmore groin, osteitis pubis, pubic inguinal pain syndrome, inguinal disruption, slap shot gut, sportsmen groin, footballers groin injury complex, hockey groin syndrome, athletic hernia, sports hernia, or core muscle injury) is considered not covered as the evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

# **Commercial Products**

Surgical treatment of athletic pubalgia groin pain in athletes (also known as athletic pubalgia, Gilmore groin, osteitis pubis, pubic inguinal pain syndrome, inguinal disruption, slap shot gut, sportsmen groin, footballers groin injury complex, hockey groin syndrome, athletic hernia, sports hernia, or core muscle injury) is considered not medically necessary as the evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

#### **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**

Groin pain in athletes is a poorly defined condition for which there is no consensus on the cause and/or treatment. Alternative names include Gilmore groin, osteitis pubis, pubic inguinal pain syndrome, inguinal disruption, slap shot gut, sportsmen groin, footballers' groin injury complex, hockey groin syndrome, athletic hernia, sports hernia, and core muscle injury.

Some believe the groin pain to be an occult hernia process, a prehernia condition, or an incipient hernia, with the major abnormality being a defect in the transversalis fascia, which forms the posterior wall of the inguinal canal. Another theory is that injury to soft tissues that attach to or cross the pubic symphysis is the primary abnormality. The most common of these injuries is thought to be at the insertion of the rectus abdominis

onto the pubis, with either primary or secondary pain arising from the adductor insertion sites onto the pubis. It has been proposed that muscle injury leads to failure of the transversalis fascia, with a resultant formation of a bulge in the posterior wall of the inguinal canal. Osteitis pubis (inflammation of the pubic tubercle) and nerve irritation/entrapment of the ilioinguinal, iliohypogastric, and genitofemoral nerves are also believed to be sources of chronic groin pain. A 2015 consensus agreement recommended the more general term groin pain in athletes, with specific diagnoses of adductor-related, iliopsoas-related, inguinal-related, and pubic-related groin pain.

An association between femoroacetabular impingement (FAI) and athletic pubalgia has also been proposed. It is believed that if FAI presents with limitations in hip range of motion, compensatory patterns during athletic activity may lead to increased stresses involving the abdominal obliques, distal rectus abdominis, pubic symphysis, and adductor musculature. Surgery for athletic pubalgia has been performed concurrently with treatment of FAI, or following FAI surgery if symptoms did not resolve.

A diagnosis of athletic pubalgia is based primarily on history, physical exam, and imaging. The clinical presentation will generally be one of gradual onset of progressive groin pain associated with activity. Physical exam will not reveal any evidence for a standard inguinal hernia or groin muscle strain. Imaging with MRI or ultrasound is generally done as part of the workup. In addition to exclusion of other sources of lower abdominal and groin pain (e.g., stress fractures, femoroacetabular impingement, labral tears), imaging may identify injury to the soft tissues of the groin and abdominal wall.

For individuals who have sports-related groin pain who receive mesh reinforcement or who receive surgical repair and release of soft tissue, the evidence includes 2 RCTs and a number of case series. Relevant outcomes are symptoms, functional outcomes, and treatment-related morbidity. The evidence on mesh reinforcement for inguinal-related groin pain includes 2 RCTs and a large prospective series. Results of the RCTs have suggested that, in carefully selected patients, mesh reinforcement results in an earlier return to play. However, a large prospective series from 2016 indicated that only about 20% of patients with chronic groin pain benefit from inguinal surgery. Further study is needed to define the patient population that would benefit from this treatment approach. An alternative approach to the treatment of groin pain in athletes involves repair or release of soft tissue. This approach has been reported in a large series. It included a 2008 review of medical records spanning 2 decades and over 5000 cases. More recent reports on these procedures from other institutions are needed. The evidence is insufficient to determine the effects of the technology on health outcomes.

## **CODING**

# Medicare Advantage Plans and Commercial Products

There is not a specific code for the surgical treatment of groin pain in athletes, use the unlisted codes below following the unlisted process:

27299 Unlisted procedure, pelvis or hip joint

49659 Unlisted laparoscopy procedure, hernioplasty, herniorrhaphy, herniotomy

49999 Unlisted procedure, abdomen, peritoneium and omentum

### **RELATED POLICIES**

Not applicable

#### **PUBLISHED**

Provider Update, May 2021 Provider Update, April 2020 Provider Update, June 2019 Provider Update, February 2019 Provider Update, April 2016

### **REFERENCES**

- 1. Litwin DE, Sneider EB, McEnaney PM et al. **Athletic pubalgia** (sports hernia). Clin Sports Med 2011;30(2):417-34.
- 2. Khan W, Zoga AC, Meyers WC. Magnetic resonance imaging of **athletic pubalgia** and the sports hernia: current understanding and practice. Magn Reson Imaging Clin N Am 2013; 21(1):97-110.
- 3. Holmich P, Uhrskou P, Ulnits L et al. Effectiveness of active physical training as treatment for long-standing adductor-related groin pain in athletes: randomised trial. Lancet 1999; 353(9151):439-43.
- 4. Holmich P, Nyvold P, Larsen K. Continued significant effect of physical training as treatment for overuse injury: 8- to 12-year outcome of a randomized clinical trial. Am J Sports Med 2011; 39(11):2447-51.
- 5. Meyers WC, McKechnie A, Philippon MJ et al. Experience with "sports hernia" spanning two decades. Ann Surg 2008; 248(4):656-65.
- 6. Paajanen H, Brinck T, Hermunen H et al. Laparoscopic **surgery** for chronic groin pain in athletes is more effective than nonoperative treatment: a randomized clinical trial with magnetic resonance imaging of 60 patients with sportsman's hernia (**athletic pubalgia**). **Surgery** 2011; 150(1):99-107.
- 7. Ahumada LA, Ashruf S, Espinosa-de-los-Monteros A et al. **Athletic pubalgia**: definition and surgical treatment. Ann Plast Surg 2005; 55(4):393-6.
- 8. Steele P, Annear P, Grove JR. **Surgery** for posterior inguinal wall deficiency in athletes. J Sci Med Sport 2004; 7(4):415-21; discussion 22-3.
- 9. Paajanen H, Syvahuoko I, Airo I. Totally extraperitoneal endoscopic (TEP) treatment of sportsman's hernia. Surg Laparosc Endosc Percutan Tech 2004; 14(4):215-8.
- 10. Kumar A, Doran J, Batt ME et al. Results of inguinal canal repair in athletes with sports hernia. J R Coll Surg Edinb 2002; 47(3):561-5.
- 11. Irshad K, Feldman LS, Lavoie C et al. Operative management of "hockey groin syndrome": 12 years of experience in National Hockey League players. **Surgery** 2001; 130(4):759-64; discussion 64-6.
- 12. American Academy of Orthopaedic Surgeons. OrthoInfo: Sportman's Hernia/**Athletic Pubalgia**. 2010. Available online at: <a href="http://orthoinfo.aaos.org/topic.cfm?topic=A00573">http://orthoinfo.aaos.org/topic.cfm?topic=A00573</a>. Last accessed May, 2014.
- 13. Sheen AJ, Stephenson BM, Lloyd DM et al. 'Treatment of the Sportsman's groin': British Hernia Society's 2014 position statement based on the Manchester Consensus Conference. Br J Sports Med 2013.
- 14. Weir A, Brukner P, Delahunt E, et al. Doha agreement meeting on terminology and definitions in groin pain in athletes. Br J Sports Med. Jun 2015;49(12):768-774. PMID 26031643
- 15. Thorborg K, Holmich P, Christensen R, et al. The Copenhagen Hip and Groin Outcome Score (HAGOS): development and validation according to the COSMIN checklist. Br J Sports Med. May 2011;45(6):478-491. PMID 21478502
- 16. Ekstrand J, Ringborg S. Surgery versus conservative treatment in soccer players with chronic groin pain: A prospective randomised study in soccer players. Eur J Sports Traumatol Rel Res. 2001;23:141-145. PMID
- 17. Kopelman D, Kaplan U, Hatoum OA, et al. The management of sportsman's groin hernia in professional and amateur soccer players: a revised concept. Hernia. Feb 2016;20(1):69-75. PMID 25380561

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