



# MASSACHUSETTS

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## Medical Policy Surgery for Groin Pain in Athletes

### Table of Contents

- [Policy: Commercial](#)
- [Policy: Medicare](#)
- [Authorization Information](#)
- [Coding Information](#)
- [Description](#)
- [Policy History](#)
- [Information Pertaining to All Policies](#)
- [References](#)

### Policy Number: 695

BCBSA Reference Number: 7.01.142

NCD/LCD: N/A

### Related Policies

- Orthopedic Applications of Platelet-Rich Plasma, #[737](#)
- Surgical Treatment of Femoroacetabular Impingement, #[145](#)

### Policy

#### Commercial Members: Managed Care (HMO and POS), PPO, and Indemnity Medicare HMO Blue<sup>SM</sup> and Medicare PPO Blue<sup>SM</sup> Members

Surgical treatment of groin pain (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 [INVESTIGATIONAL](#).

### Prior Authorization Information

#### Inpatient

- For services described in this policy, precertification/preauthorization **IS REQUIRED** for all products if the procedure is performed **inpatient**.

#### Outpatient

- For services described in this policy, see below for products where prior authorization **might be required** if the procedure is performed **outpatient**.

	Outpatient
Commercial Managed Care (HMO and POS)	This is <b>not</b> a covered service.
Commercial PPO and Indemnity	This is <b>not</b> a covered service.
Medicare HMO Blue <sup>SM</sup>	This is <b>not</b> a covered service.
Medicare PPO Blue <sup>SM</sup>	This is <b>not</b> a covered service.

## CPT Codes / HCPCS Codes / ICD Codes

*Inclusion or exclusion of a code does not constitute or imply member coverage or provider reimbursement. Please refer to the member's contract benefits in effect at the time of service to determine coverage or non-coverage as it applies to an individual member.*

*Providers should report all services using the most up-to-date industry-standard procedure, revenue, and diagnosis codes, including modifiers where applicable.*

### CPT Codes

No specific CPT codes.

### Description

Groin pain in athletes is a poorly defined condition for which there is no consensus on cause and/or treatment.<sup>1</sup> 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 is 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 are 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.<sup>1</sup> 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 has recommended the more general term *groin pain in athletes*, with specific diagnoses of adductor-related, iliopsoas-related, inguinal-related, and pubic-related groin pain.<sup>2</sup>

An association between femoroacetabular impingement (FAI) and groin pain in athletes has been proposed (see policy #145). 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. A 2015 systematic review of 24 studies that examined the co-occurrence of FAI and groin pain in athletes found an overlap of the 2 conditions that ranged from 27% of hockey players to 90% of collegiate football players who presented with hip and groin pain.<sup>3</sup> Surgery for sports-related groin pain has been performed concurrently with treatment of FAI or following FAI surgery if symptoms did not resolve.

### Diagnosis

A diagnosis of groin pain in athletes is based primarily on history, physical exam, and imaging. The clinical presentation will generally be a gradual onset of progressive groin pain associated with the activity. A physical exam will not reveal any evidence for a standard inguinal hernia or groin muscle strain. Imaging with magnetic resonance imaging or ultrasound is generally done as part of the workup. In addition to the exclusion of other sources of lower abdominal and groin pain (eg, stress fractures, FAI, labral tears), imaging may identify injury to the soft tissues of the groin and abdominal wall.<sup>4</sup>

### Treatment

#### Conservative

Many injuries will heal with conservative treatment, which includes rest, icing, nonsteroidal anti-inflammatory drugs, and rehabilitation exercises. A physical therapy (PT) program that focuses on strength and coordination of core muscles acting on the pelvis may improve recovery. In a 1999 study, 68 athletes with chronic adductor-related groin pain were randomized to 8 to 12 weeks of an active training PT program that focused on strength and coordination of core muscles, particularly adductors, or to standard PT without active training.<sup>5</sup> At 4 months posttreatment, 68% of patients in the active training group had returned to sports without groin pain compared with 12% in the standard PT group. At 8- to 12-

year follow-up, 50% of athletes in the active training group rated their outcomes as excellent compared with 22% in the standard PT group.<sup>6</sup> For in-season professional athletes, injections of corticosteroid or platelet-rich plasma (see policy #737), or a short corticosteroid burst with taper have also been used.

### Surgical

Surgical treatment is typically reserved for patients who have failed at least 3 months of conservative treatment. One approach consists of open or laparoscopic sutured hernia repair with mesh reinforcement of the posterior wall of the inguinal canal. Laparoscopic procedures may use either a transabdominal preperitoneal or an extraperitoneal approach. A variety of musculotendinous defects, nerve entrapments, and inflammatory conditions have been observed with surgical exploration. Meyers et al (2008) have proposed that any of the 17 soft tissues that attach or cross the pubic symphysis can be involved, leading to as many as 26 surgical procedures and 121 different combinations of procedures that address the various core muscle injuries.<sup>7</sup> The objective is to stabilize the pubic joint by tightening or broadening the attachments of various structures to the pubic symphysis and/or by loosening the attachments or other supporting structures via epimysiotomy or detachment.

Because various surgical procedures used to treat sports-related groin pain have reported success, it has been proposed that general fibrosis from any surgery may act to stabilize the anterior pelvis and thus play a role in improved surgical outcomes.

### Summary

Sports-related groin pain, commonly known as athletic pubalgia or sports hernia, is characterized by disabling activity-dependent lower abdominal and groin pain not attributable to any other cause. Athletic pubalgias 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.

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 randomized controlled trials 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 randomized controlled trials and a large prospective series. Results of the randomized controlled trials 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.

### Policy History

Date	Action
4/2019	BCBSA National medical policy review. Description, summary and references updated. Policy statements unchanged.
3/2018	New references added from BCBSA National medical policy. Background and summary clarified.
4/2017	BCBSA National medical policy review. Athletic pubalgia" changed to "groin pain in athletes". Title changed to "Surgery for Groin Pain in Athletes." 4/1/2017.
12/2014	New policy describing investigational indications. Effective 12/1/2014.

### Information Pertaining to All Blue Cross Blue Shield Medical Policies

Click on any of the following terms to access the relevant information:

[Medical Policy Terms of Use](#)  
[Managed Care Guidelines](#)  
[Indemnity/PPO Guidelines](#)  
[Clinical Exception Process](#)  
[Medical Technology Assessment Guidelines](#)

## References

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