

## Corporate Medical Policy

### Surgery for Groin Pain in Athletes

**File Name:** surgery\_for\_groin\_pain\_in\_athletes  
**Origination:** 8/2014  
**Last CAP Review:** 7/2019  
**Next CAP Review:** 6/2020  
**Last Review:** 7/2019

#### Description of Procedure or Service

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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. Alternative names include Gilmore's groin, osteitis pubis, pubic inguinal pain syndrome, inguinal disruption, slap shot gut, sportsmen's groin, footballers groin injury complex, hockey groin syndrome, athletic hernia, sports hernia and core muscle injury. For patients who fail conservative therapy, surgical repair of any defects identified in the muscles, tendons or nerves has been proposed.

Groin pain in athletes is a poorly defined condition, for which there is not a consensus regarding the cause and/or treatment. 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 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 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.

An association between femoroacetabular impingement (FAI) and groin pain in athletes has 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. A 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. Surgery for sports-related groin pain has been performed concurrently with treatment of FAI, or following FAI surgery if symptoms did not resolve.

A diagnosis of groin pain in athletes is based primarily on history, physical exam, and imaging with MRI or ultrasound. 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 work-up. In addition to exclusion of other sources of lower abdominal and

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groin pain (e.g., stress fractures, femoroacetabular impingement, or labral tears), imaging may identify injury to the soft tissues of the groin and abdominal wall.

Many injuries will heal with conservative treatment, which includes rest, icing, non-steroidal anti-inflammatory drugs (NSAIDs), and rehabilitation exercises. A physical therapy program that focuses on strength and coordination of core muscles acting on the pelvis may improve recovery.

## Surgical treatment

Surgical treatment is typically reserved for patients who have failed at least 3 months of conservative treatment. Surgical treatment consists of either 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 (TAPP) or a totally extraperitoneal (TEP) approach. A variety of musculotendinous defects, nerve entrapments, and inflammatory conditions have been observed with surgical exploration. Because there are a variety of surgical procedures used to treat sports-related groin pain that have all reported success, the possibility has been raised that general fibrosis from any type of surgery may act to stabilize the anterior pelvis and thus play a role in improved surgical outcomes.

## Related Policies

Surgery for Femoroacetabular Impingement

**\*\*\*Note: This Medical Policy is complex and technical. For questions concerning the technical language and/or specific clinical indications for its use, please consult your physician.**

## **Policy**

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**Surgical treatment for groin pain in athletes (also known as athletic pubalgia, Gilmore's groin, osteitis pubis, pubic inguinal pain syndrome, inguinal disruption, slap shot gut, sportsmen's groin, footballers groin injury complex, hockey groin syndrome, athletic hernia, sports hernia or core muscle injury) is considered investigational. BCBSNC does not provide coverage for investigational services or procedures.**

## **Benefits Application**

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This medical policy relates only to the services or supplies described herein. Please refer to the Member's Benefit Booklet for availability of benefits. Member's benefits may vary according to benefit design; therefore member benefit language should be reviewed before applying the terms of this medical policy.

## **When Surgery for Groin Pain in Athletes is covered**

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Not Applicable.

## **When Surgery for Groin Pain in Athletes is not covered**

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Surgical treatment of groin pain in athletes (also known as athletic pubalgia, Gilmore's groin, osteitis pubis, pubic inguinal pain syndrome, inguinal disruption, slap shot gut, sportsmen's groin, footballers groin injury complex, hockey groin syndrome, athletic hernia, sports hernia or core muscle injury) is considered investigational. BCBSNC does not provide coverage for investigational services or procedures.

## **Policy Guidelines**

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For individuals who have sports-related groin pain who receive mesh reinforcement or who have surgical repair and release of soft tissue, the evidence includes two randomized controlled trials

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(RCT), 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 two 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 has 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 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.

## Billing/Coding/Physician Documentation Information

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This policy may apply to the following codes. Inclusion of a code in this section does not guarantee that it will be reimbursed. For further information on reimbursement guidelines, please see Administrative Policies on the Blue Cross Blue Shield of North Carolina web site at [www.bcsnc.com](http://www.bcsnc.com). They are listed in the Category Search on the Medical Policy search page.

*Applicable codes: There is not a specific code for surgical treatment of groin pain in athletes. The following unlisted codes may be used: 27299, 49659, 49999.*

BCBSNC may request medical records for determination of medical necessity. When medical records are requested, letters of support and/or explanation are often useful, but are not sufficient documentation unless all specific information needed to make a medical necessity determination is included.

## Scientific Background and Reference Sources

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American Academy of Orthopaedic Surgeons. OrthoInfo: Sportman's Hernia/Athletic Pubalgia. 2010. <http://orthoinfo.aaos.org/topic.cfm?topic=A00573>

Lischuk AW, Dorantes TM, Wong W, Haims AH. Imaging of sports-related hip and groin injuries. Sports Health. 2010 May;2(3):252-61. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3445100/>

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.

BCBSA Medical Policy Reference Manual [Electronic Version]. 7.01.142, 7/10/14

Medical Director review 8/2014

Specialty Matched Consultant Advisory Panel 6/2015

BCBSA Medical Policy Reference Manual [Electronic Version]. 7.01.142, 7/9/15

BCBSA Medical Policy Reference Manual [Electronic Version]. 7.01.142, 2/11/16

Specialty Matched Consultant Advisory Panel 6/2016

BCBSA Medical Policy Reference Manual [Electronic Version]. 7.01.142, 2/9/17

Specialty Matched Consultant Advisory Panel 6/2017

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BCBSA Medical Policy Reference Manual [Electronic Version]. 7.01.142, 2/8/18

Specialty Matched Consultant Advisory Panel 6/2018

BCBSA Medical Policy Reference Manual [Electronic Version]. 7.01.142, 2/14/2019

Specialty Matched Consultant Advisory Panel 7/2019

## **Policy Implementation/Update Information**

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9/9/14 New policy developed. Surgical treatment of athletic pubalgia (also known as Gilmore's groin, osteitis pubis, pubic inguinal pain syndrome, inguinal disruption, slap shot gut, sportsmen's groin, footballers groin injury complex, hockey groin syndrome, athletic hernia, sports hernia or core muscle injury) is considered investigational. BCBSNC does not provide coverage for investigational services or procedures. Medical Director review 8/2014. Policy noticed 9/9/14 for effective date 11/11/14. (mco)

7/28/15 Specialty Matched Consultant Advisory Panel review 6/24/2015. (sk)

9/1/15 Reference added. (sk)

4/1/16 Reference added. (sk)

7/26/16 Specialty Matched Consultant Advisory Panel review 6/29/2016. (sk)

3/31/17 Reference added. Policy title changed from Surgery for Athletic Pubalgia to Surgery for Groin Pain in Athletes. Policy Guidelines updated. (sk)

7/28/17 Specialty Matched Consultant Advisory Panel review 6/28/2017. (sk)

4/27/18 Reference added. (sk)

7/13/18 Specialty Matched Consultant Advisory Panel review 6/27/2018. (sk)

4/16/19 Reference added. (sk)

9/10/19 Specialty Matched Consultant Advisory Panel review 7/30/2019. (sk)

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Medical policy is not an authorization, certification, explanation of benefits or a contract. Benefits and eligibility are determined before medical guidelines and payment guidelines are applied. Benefits are determined by the group contract and subscriber certificate that is in effect at the time services are rendered. This document is solely provided for informational purposes only and is based on research of current medical literature and review of common medical practices in the treatment and diagnosis of disease. Medical practices and knowledge are constantly changing and BCBSNC reserves the right to review and revise its medical policies periodically.