Effective November 1, 2023, refer to CMS Manual 100-02, Chapter 16-General Exclusions from Coverage for services included in this policy.

BlueCross BlueShield of Alabama

Name of Blue Advantage Policy:

Surgery for Groin Pain in Athletes

Policy #: 560
Latest Review Date: February 2023
Category: Surgery
ARCHIVED EFFECTIVE 11/1/2023

BACKGROUND:

Blue Advantage *medical policy does not conflict with Local Coverage Determinations (LCDs), Local Medical Review Policies (LMRPs) or National Coverage Determinations (NCDs) or with coverage provisions in Medicare manuals, instructions or operational policy letters. In order to be covered by Blue Advantage the service shall be reasonable and necessary under Title XVIII of the Social Security Act, Section 1862(a)(1)(A). The service is considered reasonable and necessary if it is determined that the service is:*

1. *Safe and effective;*
2. *Not experimental or investigational*;*
3. *Appropriate, including duration and frequency that is considered appropriate for the service, in terms of whether it is:*

    - *Furnished in accordance with accepted standards of medical practice for the diagnosis or treatment of the patient's condition or to improve the function of a malformed body member;*
    - *Furnished in a setting appropriate to the patient's medical needs and condition;*
    - *Ordered and furnished by qualified personnel;*
    - *One that meets, but does not exceed, the patient's medical need; and*
    - *At least as beneficial as an existing and available medically appropriate alternative.*

Routine costs of qualifying clinical trial services with dates of service on or after September 19, 2000 which meet the requirements of the Clinical Trials NCD are considered reasonable and necessary by Medicare. Providers should bill* ***Original Medicare* *for covered services that are related to* ***clinical trials*** *that meet Medicare requirements (Refer to Medicare National Coverage Determinations Manual, Chapter 1, Section 310 and Medicare Claims Processing Manual Chapter 32, Sections 69.0-69.11).*

POLICY:

Blue Advantage will treat **surgical treatment of 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) as a **non-covered benefit** and as **investigational** in all situations.

Blue Advantage does not approve or deny procedures, services, testing, or equipment for our members. Our decisions concern coverage only. The decision of whether or not to have a certain test, treatment or procedure is one made between the physician and his/her patient. Blue Advantage administers benefits based on the members' contract and medical policies. Physicians should always exercise their best medical judgment in providing the care they feel is most appropriate for their patients. Needed care should not be delayed or refused because of a coverage determination.

DESCRIPTION OF PROCEDURE OR SERVICE:

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 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. For patients who fail conservative therapy, surgical exploration and repair of any defects identified in the muscles, tendons or nerves has been proposed.

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. 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 (see medical policy #421- Surgical Treatment of Femoroacetabular Impingement). 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 college 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.

Diagnosis

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.

Conservative Treatment

Many injuries will heal with conservative treatment, which includes rest, icing, nonsteroidal anti-inflammatory drugs, and rehabilitation exercises. A physical therapy 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 program (physical therapy, PT) that focused on strength and coordination of core muscles, particularly adductors (PT+), or to standard physical therapy without active training (PT-). At 4 months after treatment, 68% of patients in the active training group had returned to sports without groin pain compared with 12% in the PT- group. At 8 to 12 year follow-up, 50% of athletes in the active training group rated their outcome as excellent compared with 22% in the PT- group. For in-season professional athletes, injections of corticosteroid or platelet-rich plasma, or a short corticosteroid burst with taper have also been used.

Surgical Treatment

Surgical treatment is typically reserved for patients who have failed at least three months of conservative treatment. One approach 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 or a totally extraperitoneal (TEP) approach. A variety of musculotendinous defects, nerve entrapments, and inflammatory conditions have been observed with surgical exploration. Meyers proposes 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. The objective of this approach to surgical treatment is to stabilize the pubic joint by tightening or broadening the attachments of various structures to the pubic symphysis and/or loosening the attachments or other supporting structures via epimysiotomy or detachment.

Because there are a variety of surgical procedures used to treat athletic pubalgia that have all reported success, it has been proposed that general fibrosis from any type of surgery may act to stabilize the anterior pelvis and thus play a role in improved surgical outcomes.

KEY POINTS:

The most recent literature review has been updated regularly with searches of the MEDLINE database. The most recent literature update was performed through January 2, 2023.

Summary of Evidence

For individuals who have sports-related groin pain who receive mesh reinforcement, the evidence includes 2 randomized controlled trials (RCTs), and a large prospective series. Relevant outcomes are symptoms, functional outcomes, and treatment-related morbidity. 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. The evidence is insufficient to determine the effects of the technology results in an improvement in the new health outcome.

For individuals who have sports-related groin pain who receive surgical repair and release of soft tissue, the evidence includes a large case series. Relevant outcomes are symptoms, functional outcomes, and treatment-related morbidity. An alternative approach for 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 5,000 cases. More recent reports on these procedures from other institutions are needed. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

Practice Guidelines and Position Statements

American Academy of Orthopaedic Surgeons

Reviewed in 2022, the American Academy of Orthopaedic Surgeons has an online educational website on sports hernia (athletic pubalgia). AAOS indicated that a sports hernia is a painful soft tissue injury that occurs in the groin area. AAOS advised that "in many cases, 4 to 6 weeks of physical therapy will resolve any pain and allow an athlete to return to sports. If, however, the pain comes back when you resume sports activities, you may need to consider surgery to repair the torn tissues."

American College of Occupational and Environmental Medicine

The American College of Occupational and Environmental Medicine (ACOEM) released a guideline on hip and groin disorders in 2019. For the treatment of groin strains, sports hernias, or adductor-related groin pain, the ACOEM recommends work and activity modifications (strength of evidence [SOE]: recommended, insufficient evidence; level of confidence [LOC]: moderate), nonsteroidal anti-inflammatory drugs (SOE: recommended, insufficient evidence; LOC: moderate), and ice or heat or wraps (SOE: recommended, insufficient evidence; LOC: low).

U.S. Preventative Services Task Force Recommendations

Not applicable.

KEY WORDS:
Sports Hernia, 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, core muscle injury, athletic pubalgia

APPROVED BY GOVERNING BODIES:
Surgical procedures do not require U.S. Food and Drug Administration (FDA) approval.

BENEFIT APPLICATION:
Coverage is subject to member's specific benefits. Group specific policy will supersede this policy when applicable.

CURRENT CODING:
CPT Codes:

27299	Unlisted procedure, pelvis or hip joint
49659	Unlisted laparoscopy procedure, hernioplasty, herniorrhaphy, herniotomy
49999	Unlisted procedure, abdomen, peritoneum and omentum

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POLICY HISTORY:

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Medical Policy Group, July 2015
Medical Policy Group, February 2016

Medical Policy Group, February 2018
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