MEDICAL POLICY – 7.01.142
Surgery for Groin Pain in Athletes

BCBSA Ref. Policy: 7.01.142
Effective Date: May 1, 2020
Last Revised: April 7, 2020
Replaces: N/A
RELATED MEDICAL POLICIES: None

Select a hyperlink below to be directed to that section.

POLICY CRITERIA | CODING | RELATED INFORMATION
EVIDENCE REVIEW | REFERENCES | HISTORY

∞ Clicking this icon returns you to the hyperlinks menu above.

Introduction

The medical term for sports-related groin pain is athletic pubalgia. More commonly it's called a sports hernia. But this type of pain doesn’t come from a true hernia. It’s a soft tissue injury that most often is diagnosed in males who take part in sports that require rapid twisting and sudden changes in direction, such as soccer, hockey, wrestling, ice hockey, and football. Most of these injuries will heal with conservative treatment. This treatment includes resting, applying ice, and taking medication like nonsteroidal anti-inflammatory drugs. Physical therapy that focuses on the core muscles acting on the pelvis may improve recovery. Surgery on muscles, tendons, or nerves has been proposed as a way to alleviate the pain from sport-related groin pain. These types of surgery are investigational (unproven). More studies are needed to show whether surgery for sport-related groin pain is effective.

Note: The Introduction section is for your general knowledge and is not to be taken as policy coverage criteria. The rest of the policy uses specific words and concepts familiar to medical professionals. It is intended for providers. A provider can be a person, such as a doctor, nurse, psychologist, or dentist. A provider also can be a place where medical care is given, like a hospital, clinic, or lab. This policy informs them about when a service may be covered.
Surgery for groin pain in athletes | 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) is considered investigational.

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>27299</td>
<td>Unlisted procedure, pelvis or hip joint</td>
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<tr>
<td>49659</td>
<td>Unlisted laparoscopy procedure, hernioplasty, herniorrhaphy, herniotomy</td>
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<td>49999</td>
<td>Unlisted procedure, abdomen, peritoneum and omentum</td>
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</tbody>
</table>

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Related Information

N/A

Evidence Review

Description

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 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.

**Background**

**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 (MRI) 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, femoroacetabular impingement, labral tears), imaging may identify injury to the soft tissues of the groin and abdominal wall.¹

**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.² 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.³ For in-season professional athletes, injections of corticosteroid or platelet-rich plasma, 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. 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 of Evidence**

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 2 randomized controlled trials (RCTs) and a number of case series. The 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 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 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.

**Ongoing and Unpublished Clinical Trials**

Some currently unpublished trials that might influence this policy are listed in Table 1.
Table 1. Summary of Key Trials

<table>
<thead>
<tr>
<th>NCT No.</th>
<th>Trial Name</th>
<th>Planned Enrollment</th>
<th>Completion Date</th>
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<tr>
<td><strong>Ongoing</strong></td>
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<tr>
<td>NCT01876342</td>
<td>Total ExtraPeritoneal (TEP) Versus Open Minimal Suture Repair for Treatment of Sportsman’s Hernia/Athletic Pubalgia: A Randomized Multi-center Trial</td>
<td>60</td>
<td>Dec 2018</td>
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<tr>
<td><strong>Unpublished</strong></td>
<td></td>
<td></td>
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<td>NCT02297711</td>
<td>Total ExtraPeritoneal (TEP) Versus Open Minimal Suture Repair for Treatment of Sportsman’s Hernia/Athletic Pubalgia: A Randomized Multi-center Trial</td>
<td>100</td>
<td>Oct 2015 (unknown)</td>
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<td>NCT00934388</td>
<td>A Randomised, Blinded Study on Laparoscopic Mesh Reinforcement for Chronic Groin Pain</td>
<td>80</td>
<td>Dec 2015 (unknown)</td>
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</table>

NCT: national clinical trial

Practice Guidelines and Position Statements

*American Academy of Orthopaedic Surgeons*

The American Academy of Orthopaedic Surgeons has an online educational website, last reviewed in 2017, on sports hernia (athletic pubalgia). The Academy indicated that a sports hernia is a painful soft tissue injury that occurs in the groin area. The Academy 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.”

Medicare National Coverage

There is no national coverage determination.

Regulatory Status

Treatment of sports-related groin pain is a surgical procedure and, as such, is not subject to regulation by the U.S. Food and Drug Administration.
References


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<thead>
<tr>
<th>Date</th>
<th>Comments</th>
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<td>09/08/14</td>
<td>New Policy. Policy created with literature review through June 25, 2014. Surgical treatment of athletic pubalgia is considered investigational.</td>
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<td>Annual Review, changes approved April 12, 2016. Policy updated with literature review through December 13, 2015; reference 2 added. Policy statement unchanged.</td>
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<td>05/01/20</td>
<td>Annual Review, approved April 7, 2020. Policy updated with literature review through December 2019; no references added. Policy statement unchanged.</td>
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  - Qualified interpreters
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U.S. Department of Health and Human Services
200 Independence Avenue SW, Room 509F, HHH Building
Washington, D.C. 20201, 1-800-368-1019, 800-537-7697 (TDD)

Complaint forms are available at

Getting Help in Other Languages

This Notice has Important Information. This notice may have important information about your application or coverage through Premera Blue Cross. There may be key dates in this notice. You may need to take action by certain deadlines to keep your health coverage or help with costs. You have the right to get this information and help in your language at no cost.

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Oromo (Cushite):
Lakkoofsaa bibiibila 800-722-1471 (TTY: 800-842-5357) ti bibiibila.

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Deutsche (German):

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Questo avviso contiene informazioni importanti. Questo avviso può contenere informazioni importanti sulla tua domanda o copertura attraverso Premera Blue Cross. Potrebbero esserci date chiave in questo avviso. Potrebbe essere necessario un tuo intervento entro una scadenza determinata per consentirti di mantenere la tua copertura o sovvenzione. Hai il diritto di ottenere queste informazioni e assistenza nella tua lingua gratuitamente.
Chiama 800-722-1471 (TTY: 800-842-5357).
Premera Blue Cross. Es posible que haya fechas clave en este aviso. Es posible que deba tomar alguna medida antes de determinadas fechas. 

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Ang Paunawa na ito ay naglalaman ng mahalagang impormasyon. Ang paunawa na ito ay maaaring nagagamit na sa iyong kaganapan o tulong na maaga. Tumawag sa 800-722-1471 para kahit anong panahon upang mapanatili ang iyong pagsakop sa kalusugan o tulong na maaga. 

Română (Romanian):