

ATHLETIC PUBALGIA SURGERY

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INSTRUCTIONS FOR USE

This Medical Policy provides assistance in interpreting UnitedHealthcare benefit plans. When deciding coverage, the enrollee specific document must be referenced. The terms of an enrollee's document (e.g., Certificate of Coverage (COC) or Summary Plan Description (SPD) and Medicaid State Contracts) may differ greatly from the standard benefit plans upon which this Medical Policy is based. In the event of a conflict, the enrollee's specific benefit document supersedes this Medical Policy. All reviewers must first identify enrollee eligibility, any federal or state regulatory requirements and the enrollee specific plan benefit coverage prior to use of this Medical Policy. Other Policies and Coverage Determination Guidelines may apply. UnitedHealthcare reserves the right, in its sole discretion, to modify its Policies and Guidelines as necessary. This Medical Policy is provided for informational purposes. It does not constitute medical advice.

UnitedHealthcare may also use tools developed by third parties, such as the MCG™ Care Guidelines, to assist us in administering health benefits. The MCG™ Care Guidelines are intended to be used in connection with the independent professional medical judgment of a qualified health care provider and do not constitute the practice of medicine or medical advice.

BENEFIT CONSIDERATIONS

Essential Health Benefits for Individual and Small Group:

For plan years beginning on or after January 1, 2014, the Affordable Care Act of 2010 (ACA) requires fully insured non-grandfathered individual and small group plans (inside and outside of Exchanges) to provide coverage for ten categories of Essential Health Benefits ("EHBs"). Large group plans (both self-funded and fully insured), and small group ASO plans, are not subject to the requirement to offer coverage for EHBs. However, if such plans choose to provide coverage for benefits which are deemed EHBs (such as maternity benefits), the ACA requires all dollar limits on those benefits to be removed on all Grandfathered and Non-Grandfathered plans. The determination of which benefits constitute EHBs is made on a state by state basis. As such, when using this guideline, it is important to refer to the enrollee's specific plan document to determine benefit coverage.

COVERAGE RATIONALE

Surgical repair for treating athletic pubalgia is unproven and not medically necessary.

Several studies have shown that groin pain and function are improved after surgical repair for athletic pubalgia. However, most of these studies were uncontrolled, used small sample sizes and did not provide comparisons of the surgical methods used to treat athletic pubalgia. Large prospective randomized studies of individuals with athletic pubalgia with more detailed patient outcome measurements are needed to determine optimal treatment.

APPLICABLE CODES

The Current Procedural Terminology (CPT[®]) codes and Healthcare Common Procedure Coding System (HCPCS) codes listed in this policy are for reference purposes only. Listing of a service code in this policy does not imply that the service described by this code is a covered or non-covered health service. Coverage is determined by the enrollee specific benefit document and applicable laws that may require coverage for a specific service. The inclusion of a code does not imply any right to reimbursement or guarantee claims payment. Other policies and coverage determination guidelines may apply. This list of codes may not be all inclusive.

CPT [®] Code	Description
49659	Unlisted laparoscopy procedure, hernioplasty, herniorrhaphy, herniotomy
49999	Unlisted procedure, abdomen, peritoneum and omentum

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DESCRIPTION OF SERVICES

Athletic pubalgia, also known as Gilmore's groin, sports/sportsman's hernia or occult hernia is a condition limited almost exclusively to professional or other high-performance athletes. It is characterized by pain around the abdomen, groin, hip or thigh. The pain frequently originates from a muscle or tendon injury in the inguinal area near the attachment of the rectus abdominis to the pubis and in the adjacent internal oblique muscles near the region of the abdominal wall. Pain and weakness in this area are most commonly seen with direct inguinal hernias; however, in this case, the pain presents without any evidence of herniation or other medical diagnosis. Athletic pubalgia predominantly affects men and is most common among athletes whose sport of choice requires frequent twisting and turning, such as soccer, football and hockey.

The precise etiology of athletic pubalgia is not known, but is most commonly believed to result from weakness of the abdominal or inguinal wall, associated with tearing of muscles and/or ligaments within the pelvis. A wide variety of anatomical abnormalities that may account for the pain are observed on surgical exploration. There are no objective findings on physical examination or a definitive diagnostic test for athletic pubalgia.

Conservative treatments such as rest, anti-inflammatory drugs and physical therapy may fail to relieve the pain. While a variety of surgical techniques have been used, opinions about the value of surgery differ greatly and there is a lack of consensus supporting any one particular procedure. Most procedures currently being described are minor variations of standard hernia repair. Pelvic floor surgery is another surgical method that has been considered to treat athletic pubalgia. This surgery involves reattachment of the rectus abdominis muscle either unilaterally or bilaterally and often concurrently with an ipsilateral adductor release, rather than protection of the inguinal floor near the internal ring. Given the potentially long recovery time, reportedly from 10 weeks to 6 months after open surgery, laparoscopic interventions have also been investigated.

CLINICAL EVIDENCE

Paajanen et al. (2011) conducted a randomized, prospective study on 60 athletes with chronic groin pain and suspected sportsman's hernia. Patients were randomized into an operative group (n=30) or a physiotherapy group (n=30). Operation was performed using a totally extraperitoneal repair in which mesh was placed behind the symphysis and painful groin area. Conservative treatment included at least 2 months of active physiotherapy, including corticosteroid injections and oral anti-inflammatory analgesics. The outcome measures were pre- and postoperative pain using a visual analogue scale and partial or full recovery to sports activity at 1, 3, 6, and 12 months after randomization. The athletes in both treatment groups had similar characteristics and pain scores. Operative repair was more effective than nonoperative treatment to decrease chronic groin pain after 1 month and up to 12 months of follow-up. Of the 30 athletes who underwent operation, 27 (90%) returned to sports activities after 3 months of convalescence compared to 8 (27%) of the 30 athletes in the nonoperative group. Of the 30 athletes in the conservatively treated group, 7 (23 %) underwent operation later because of persistent groin pain. Larger, well-designed studies are needed to confirm these results.

Three systematic reviews addressed the topic of sports hernias (Caudill, 2008; Jansen, 2008; Swan, 2007).

Caudill et al. (2008) found that surgery seemed to be more effective than conservative treatment, and laparoscopic techniques generally enabled a quicker recovery time than open repair. However, in addition to better descriptions of surgical anatomy and procedures and conservative and post-surgical rehabilitation, well-designed research studies are needed, which include more detailed serial patient outcome measurements in addition to basing success solely on return to sports activity timing. This information is necessary to better understand sports hernia pathogenesis, verify superior surgical approaches, develop evidence-based screening and prevention strategies, and more effectively direct both conservative and post-surgical rehabilitation.

Jansen et al. (2008) stated that studies describing surgery generally mention failure of conservative measures, although a description of these conservative measures is mostly lacking. During surgery, a reinforcement of the abdominal wall is applied in most cases, using an open or laparoscopic approach. For patients with a positive herniography and/or positive ilioinguinal or iliohypogastric nerve block tests, there are indications (level II) that surgery results in earlier return to sport compared with exercise therapy. Possibly, laparoscopic intervention might result in an earlier return to sport compared with open approach surgery (level III).

Swan et al. (2007) performed an overview of the anatomy and pathoanatomy and a systematic review of the literature to gain insight into the disease and its treatment. Most studies are Level IV. The anatomy involved, diagnostic criteria, and treatment modalities are inconsistently described in the medical, surgical and orthopaedic literature. There is no evidence-based consensus available to guide decision-making. Open and laparoscopic repairs produce excellent results, but the latter allows earlier return to play.

Van Veen et al. (2007) evaluated 55 athletes with undiagnosed chronic groin pain. All patients underwent an endoscopic total extraperitoneal (TEP) mesh placement. Incipient hernia was diagnosed in 36 athletes. In 20 patients (36%), an inguinal hernia was found. All the athletes returned to their normal sports level within 3 months after the operation. The investigators concluded that a TEP repair must be proposed to patients with prolonged groin pain unresponsive to conservative treatment. If no clear pathology is identified, reinforcement of the wall using a mesh offers good clinical results.

A retrospective study included a review of 750 laparoscopic preperitoneal hernias procedures. A

sports hernia was defined as a tear in the transversalis fascia that was not evident by preoperative physical exam. A biologic mesh, Surgisis, was placed, uncut, over the myopectinate orifice and fixed with five tacks or fibrin glue. Patients were followed up at 2 and 6 weeks, 6 months, and 1 year. Ten professional and amateur athletes were found to have sports hernias. Operative time averaged 32 minutes and there were no major complications. All athletes returned to full activities in 4 weeks. One patient did not show improvement in his symptoms. No patient developed a recurrent hernia. The investigators concluded that laparoscopic exploration and repair with biologic mesh should be considered in athletes with chronic groin pain that does not improve after conventional treatments have failed (Edelman, 2006).

In a retrospective study, 47 patients with posterior inguinal wall deficiency underwent herniorraphy. Seventy-seven percent of the patients were able to return to sporting activities in an average time of 4 months (Steele, 2004).

In another retrospective study, 131 athletes with groin pain due to deficiency of the posterior inguinal wall underwent laparoscopic repair with a trans-abdominal preperitoneal technique for hernias. All patients were back to full sporting activities within 2 to 3 weeks after surgery. There was 1 recurrence after a mean follow-up of 5 years (Genitsaris, 2004).

A prospective cohort study was done to evaluate surgical treatment in 41 male athletes with chronic groin pain who were resistant to medical treatment. The patients were treated using hernia repair and percutaneous adductor longus tenotomy. All patients returned to sports on an average of 6.9 months after surgery (range 6 to 15 months). Four patients performed at a reduced level and 37 patients performed at the same level after returning to athletic activities (Van Der Donckt, 2003).

The clinical evidence was reviewed on April 19, 2014 with no additional information identified that would change the unproven conclusion.

U.S. FOOD AND DRUG ADMINISTRATION (FDA)

Laparoscopic surgery is a procedure and therefore not subject to FDA regulation. There are a number of surgical meshes approved for use in pelvic surgery, although none used in the reviewed studies were approved specifically for athletic pubalgia. See the following website for additional information (use product code FTM). Available at:
<http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfPMN/pmn.cfm>. Accessed April 19, 2014

CENTERS FOR MEDICARE AND MEDICAID SERVICES (CMS)

Medicare does not have a National Coverage Determination (NCD) for athletic pubalgia surgery. Local Coverage Determinations (LCDs) do not exist at this time. (Accessed April 30, 2014)

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van Veen RN, de Baat P, Heijboer MP, Kazemier G, Punt BJ, Dwarkasing RS, Bonjer HJ, van Eijck CH. Successful endoscopic treatment of chronic groin pain in athletes. *Surg Endosc.* 2007 Feb;21(2):189-93.

POLICY HISTORY/REVISION INFORMATION

Date	Action/Description
08/01/2014	<ul style="list-style-type: none">Reorganized policy contentAdded benefit considerations language for <i>Essential Health Benefits for Individual and Small Group</i> plans to indicate:<ul style="list-style-type: none">For plan years beginning on or after January 1, 2014, the Affordable Care Act of 2010 (ACA) requires fully insured non-grandfathered individual and small group plans (inside and outside of Exchanges) to provide coverage for ten categories of Essential Health Benefits ("EHBs")Large group plans (both self-funded and fully insured), and small group ASO plans, are not subject to the requirement to offer coverage for EHBs; however, if such plans choose to provide coverage for benefits which are deemed EHBs (such as maternity benefits), the ACA requires all dollar limits on those benefits to be removed on all Grandfathered and Non-Grandfathered plansThe determination of which benefits constitute EHBs is made on a state by state basis; as such, when using this guideline, it is important to refer to the enrollee's specific plan document to determine benefit coverageUpdated coverage rationale; added language to indicate the unproven services are "not medically necessary"Archived previous policy version 2013T0341J

Archived Policy Versions (For Internal Use Only)

Effective Date	Policy Number	Policy Title
07/01/2013 – 07/31/2014	2013T0341J	Athletic Pubalgia Surgery
07/01/2012 – 06/30/2013	2012T0341I	Athletic Pubalgia Surgery
07/01/2011 – 06/30/2012	2011T0341H	Athletic Pubalgia Surgery
07/23/2010 – 06/30/2011	2010T0341G	Athletic Pubalgia Surgery
10/01/2009 – 07/22/2010	2009T0341F	Athletic Pubalgia Surgery
01/15/2009 – 09/30/2009	2009T0341E	Athletic Pubalgia Surgery