MEDICAL POLICY

Athletic Pubalgia Surgery

Effective Date: 3/1/2020

Section: SUR
Policy No: 326

Technology Assessment Committee Approved Date:
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Medical Policy Committee Approved Date: 10/17;
12/18; 2/19; 2/2020

3/1/2020

Medical Officer Date

See Policy CPT CODE section below for any prior authorization requirements

SCOPE:

Providence Health Plan, Providence Health Assurance, Providence Plan Partners, and Ayin Health Solutions as applicable (referred to individually as “Company” and collectively as “Companies”).

APPLIES TO:

All lines of business

BENEFIT APPLICATION

Medicaid Members

Oregon: Services requested for Oregon Health Plan (OHP) members follow the OHP Prioritized List and Oregon Administrative Rules (OARs) as the primary resource for coverage determinations. Medical policy criteria below may be applied when there are no criteria available in the OARs and the OHP Prioritized List.

POLICY CRITERIA

Surgical treatment (open or laparoscopic) of athletic pubalgia is considered investigational and is not covered.

CPT CODES

All Lines of Business

Unlisted Codes

All unlisted codes will be reviewed for medical necessity, correct coding, and pricing at the claim level. If an unlisted code is billed related to services addressed in this policy then it will be denied as Not Covered.

49659 Unlisted laparoscopy procedure, hernioplasty, herniorrhaphy, herniotomy
DESCRIPTION

Athletic Pubalgia

According to Hayes, athletic groin pain (i.e., athletic pubalgia) occurs in 3% to 23% of athletes, most commonly men.1 The greatest risk factor for athletic pubalgia is sports that involve rapid acceleration and deceleration with changes in direction while running and kicking, such as soccer, hockey, rugby, and football. The risk of athletic pubalgia is also increased with a higher level of play, reduced hip adductor strength, and previous groin injury. Per Hayes, “(t)he first line of treatment consists of conservative treatments such as rest, physical therapy and rehabilitation, anti-inflammatory medications, and corticosteroid injections. Persistent symptoms may warrant surgical or laparoscopic intervention.”1

Surgical Treatments

Laparoscopic or open surgical procedures may be used to treat athletic pubalgia when conservative therapies have failed.1 The goal of surgical treatment would be to release tension and provide support to the musculature. Per Hayes, “(t)he most common laparoscopic techniques for treatment of athletic groin pain include video-assisted transabdominal preperitoneal (TAPP) repair and totally extraperitoneal (TEP) repair.” A variety of open surgical procedures have been used to treat athletic pubalgia, including modifications of several hernia repair techniques.

REVIEW OF EVIDENCE

A review of the ECRI, Hayes, Cochrane, and PubMed databases was conducted regarding the use of surgical treatment of athletic pubalgia. Below is a summary of the available evidence identified through January 2020.

- In 2016 (updated May 2019), Hayes conducted an evidence review to evaluate laparoscopic and open surgical repairs for treatment of athletic groin pain.1 A total of 7 studies were identified as eligible for inclusion; including 2 randomized controlled trials (RCTs), 2 prospective cohort studies, and 3 retrospective cohort studies. These studies included patients who participate in sports associated with groin injuries and who have chronic groin pain (≥ 3 months) not explained by other causes and not responsive to conservative treatment. Sample sizes ranged from 28 to 155 patients and follow-up time varied (RCTs: 6 to 12 months; observational studies: 1 year to average 13 years (range 1-22); 1 study did not report length of follow-up). The surgical interventions included in the review included laparoscopic surgery (totally extraperitoneal [TEP] and transabdominal preperitoneal [TAPP]) and open surgery with sutures or mesh placement and/or muscle or nerve release. The outcomes of interest included return to activity, pain score, patient satisfaction, and adverse events.

The studies suggested that, “both laparoscopic and open surgical procedures have a high success rate defined by percentage returning to full activity (64.3% to 97% of patients).”1 A total of 3 studies reported time to return to activity, and 2 of these reported statistically significantly different results between surgical therapy and placebo. One study reported a median of 3 weeks
for return to activity after laparoscopic surgery compared with 5 weeks after open surgery (P<0.05). The second study reported a median of 5.6 weeks after minimal repair compared with 25.8 weeks after open surgery (P=0.002). The third study reported no differences between groups for time to return to activity. A total of 2 studies compared surgical interventions with conservative treatment and found statistically significant differences in favor of surgical interventions for pain reduction. In regards to patient satisfaction, 1 out of 3 studies identified a statistically significant difference between surgical and conservative therapy patients. Adverse event rates were low and no statistically significant differences were reported between groups for any study.

The quality of evidence was determined to be low due to significant methodological limitations of studies, which included a lack of randomization, lack of blinding, potential selection bias, mixed patient populations and treatment groups, not reporting statistical testing, and retrospective data collection. Ultimately, Hayes gave a C rating (defined as potential but unproven benefit) for laparoscopic or open surgical interventions to treat athletic groin pain when symptoms are recalcitrant to conservative treatments and other diagnoses have been ruled out. The Hayes review concluded, "(t)here is insufficient evidence to determine whether a particular laparoscopic or open surgical technique is superior to another. More rigorous studies are needed to establish the relative benefits and harms of different laparoscopic and open surgical procedures for this patient population."

- In 2017, ECRI conducted a systematic review of studies evaluating techniques for diagnosing and treating athletic pubalgia. The review included 18 studies examining surgical and minimally invasive treatments of athletic pubalgia (2 systematic reviews (n>1,000), 3 nonrandomized studies (n=230), and 13 case series (n=2,211)). Follow-up times varied from 1 month to 7 years. The primary outcomes evaluated were return-to-sports rates, reduced pain, improved quality of life (QOL) and few post-surgery complications. ECRI rated the overall quality of evidence as "low" due to the lack of randomized studies comparing surgical and conservative treatments in independent patient groups. Despite these limitations, ECRI concluded that "limited evidence supports the short- and long-term safety and effectiveness of various open and minimally invasive surgical treatments." 2

One prospective study published after Hayes and ECRI conducted literature searches reported a median pain score of 0 (p <0.001) among patients who underwent surgery for athletic pubalgia. The study nonetheless suffered from a small sample size (n=32) and inadequate follow-up (3 months).

**CLINICAL PRACTICE GUIDELINES**

**American Academy of Orthopedic Surgeons (AAOS)**

In 2017, the AAOS reviewed the webpage on sports hernia (athletic pubalgia) located on its educational website. The webpage states 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." The webpage does not cite any evidence to support this claim.
CENTERS FOR MEDICARE & MEDICAID

As of January 2020, no Centers for Medicare & Medicaid (CMS) coverage guidance was identified which addresses athletic pubalgia surgery.

POLICY SUMMARY

There is insufficient evidence to support the use of surgery (open or laparoscopic) for the treatment of athletic pubalgia. Further studies of good methodological quality are required to establish the safety, efficacy, and medical necessity of athletic pubalgia surgery. No US evidence-based clinical practice guidelines were identified which evaluated surgical treatments of athletic pubalgia.

INSTRUCTIONS FOR USE

Company Medical Policies serve as guidance for the administration of plan benefits. Medical policies do not constitute medical advice nor a guarantee of coverage. Company Medical Policies are reviewed annually and are based upon published, peer-reviewed scientific evidence and evidence-based clinical practice guidelines that are available as of the last policy update. The Companies reserve the right to determine the application of Medical Policies and make revisions to Medical Policies at any time. Providers will be given at least 60-days notice of policy changes that are restrictive in nature.

The scope and availability of all plan benefits are determined in accordance with the applicable coverage agreement. Any conflict or variance between the terms of the coverage agreement and Company Medical Policy will be resolved in favor of the coverage agreement.

REGULATORY STATUS

Mental Health Parity Statement

Coverage decisions are made on the basis of individualized determinations of medical necessity and the experimental or investigational character of the treatment in the individual case.

REFERENCES

1. Hayes Inc. Laparoscopic and Open Surgical Repairs for Treatment of Athletic Groin Pain. 2018; https://www.hayesinc.com/subscribers/displaySubscriberArticle.do?articleId=42266&searchStore=%24search_type%3Dall%24icd%3D%24keywords%3Dpubalgia%24status%3Dall%24page%3D1%24from_date%3D%24to_date%3D%24report_type_options%3D%24technology_type_options%3D%24organ_system_options%3D%24specialty_options%3D%24order%3DasearchRelevance#. Accessed 01/07/2019.