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MEDICAL POLICY – 4.01.502

Surgical Interruption of Pelvic Nerve Pathways for Chronic Pelvic Pain

Effective Date:	Dec. 1, 2024	RELATED MEDICAL POLICIES:
Last Revised:	Nov. 25, 2024	NONE
Replaces:	N/A	

Select a hyperlink below to be directed to that section.

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Introduction

Pain in the pelvic area that lasts six months or longer is known as chronic pelvic pain. This type of pain can be related to menstruation. It can also be related to other medical conditions, including extra tissue growing outside the uterus (endometriosis), abnormal growths in or outside of the uterus (fibroids), or infections in the reproductive organs (pelvic inflammatory disease). Two surgeries that are meant to relieve chronic pelvic pain are uterine nerve ablation (UNA) and presacral neurectomy (PSN). In these surgeries, nerves in the pelvic area are destroyed or removed. The use of uterine nerve ablation or presacral neurectomy to treat chronic pelvic pain is unproven (investigational). More studies are needed to see if these procedures improve health outcomes.

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.

Policy Coverage Criteria

Service	Investigational
Uterine nerve ablation (UNA) or presacral neurectomy (PSN)	**UNA or PSN (both open and laparoscopic) for the treatment of chronic pelvic pain, including primary or secondary dysmenorrhea, is considered investigational.**

Coding

Code	Description
CPT	
58578	Unlisted laparoscopy procedure, uterus

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Related Information

Definition of Terms

Chronic pain: Pain that originates from pelvic organs/structures that lasts for six months or longer.[18]

Primary dysmenorrhea: Pain in the lower abdomen related to menstruation that occurs in the absence of an identifiable cause.

Secondary dysmenorrhea: Pelvic pain that results from an anatomic or pathological disorder such as endometriosis, fibroids, or pelvic inflammatory disease.

Evidence Review

Description

Two laparoscopic surgical approaches are proposed as adjuncts to conservative surgical therapy for the treatment of primary and secondary dysmenorrhea. These approaches are laparoscopic

uterine nerve ablation (LUNA) and presacral neurectomy (PSN).

Background

Dysmenorrhea is defined as painful menstrual cramps. Primary dysmenorrhea occurs in the absence of an identifiable cause, while secondary dysmenorrhea is related to an identifiable pathologic condition (eg, endometriosis, adenomyosis, pelvic adhesions). The etiology of primary dysmenorrhea is incompletely understood, but is thought to be related to the overproduction of uterine prostaglandins. Therefore, firstline pharmacologic therapy typically includes nonsteroidal anti-inflammatory drugs (NSAIDs), which reduce prostaglandin production. Oral contraceptives are another approach. Patients with secondary dysmenorrhea may be offered both NSAIDs and oral contraceptives, as well as a variety of other hormonal therapies. Patients with endometriosis frequently undergo surgery to ablate, excise, or enucleate endometrial deposits or lyse pelvic adhesions. Collectively, these surgical procedures may be referred to as conservative surgical therapy.

LUNA and laparoscopic presacral neurectomy (PSN) are two surgical approaches that have been investigated to interrupt most of the cervical sensory nerve fibers in patients with dysmenorrhea. LUNA involves the transection of the uterosacral ligaments at their insertion into the cervix, while PSN involves removal of the presacral nerves within the interiliac triangle. PSN, which can be performed via open or laparoscopic approaches, interrupts a greater number of nerve pathways compared with LUNA, and is technically more demanding. Either LUNA or PSN can be performed as adjuncts to conservative surgical therapy in patients with secondary dysmenorrhea.

Summary of Evidence

For individuals who have primary or secondary dysmenorrhea who receive LUNA, the evidence includes randomized controlled trials (RCTs) and a systematic review. Relevant outcomes are symptoms and treatment-related morbidity. RCTs comparing LUNA plus conventional treatment to conventional treatment alone, and meta-analyses of these trials, have not found a consistent benefit for the addition of LUNA. Moreover, RCT sample sizes have tended to be small, and few studies have followed patients beyond 12 months. The evidence is insufficient to determine the effects of the technology on health outcomes.

For individuals who have primary or secondary dysmenorrhea who receive presacral neurectomy (PSN), the evidence includes RCTs and a systematic review. Relevant outcomes are symptoms and treatment related morbidity. No RCTs on primary dysmenorrhea were found and there are

only a few on secondary dysmenorrhea. A pooled analysis of 2 trials with a total of 197 women with secondary dysmenorrhea associated with endometriosis found significantly greater symptom relief with PSN plus surgery than with surgery alone at 12 months. The largest and most recent trial (2003) found improvement in pain outcomes, but also higher complication rates with PSN; this trial also had methodologic limitations that limit interpretation of its findings. The net health benefit remains unclear and needs to be further assessed in additional trials. The evidence is insufficient to determine the effects of the technology on health outcomes.

Ongoing and Unpublished Clinical Trials

A search of **ClinicalTrials.gov** in October 2024 did not identify any ongoing or unpublished trials that would likely influence this review.

Practice Guidelines and Position Statements

In 2007, the National Institute for Health and Clinical Excellence issued interventional procedure guidance number 234 (IPG234) on LUNA for chronic pelvic pain.[12] The guidance stated: "The evidence on LUNA for chronic pelvic pain suggests that it is not efficacious and therefore should not be used."

In 2020, the American College of Obstetricians and Gynecologists issued a practice bulletin number 218 for chronic pelvic pain[18]. In this bulletin the committee authors stated, "There is limited evidence to support laparoscopic uterosacral nerve ablation and presacral neurectomy in the treatment of chronic pelvic pain."

Medicare National Coverage

There is no national coverage determination.

Regulatory Status

LUNA and PSN are surgical procedures and, as such, are not subject to regulation by the US Food and Drug Administration.

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History

Date	Comments
06/01/21	New policy, approved May 11, 2021. Uterine nerve ablation or presacral neurectomy for the treatment of chronic pelvic pain is considered investigational.
10/01/22	Annual Review, approved September 12, 2022. Policy reviewed; no references added. Policy statement unchanged.
11/01/23	Annual Review, approved October 23, 2023. Policy reviewed. No references added. Policy statement unchanged.
12/01/24	Annual Review, approved November 25, 2024. Removed archived BCBSA policy 4.01.17 from Reference Policies. Policy reviewed; no references added. Policy statement unchanged.

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