

Effectiveness of Treatments for Noncyclic Chronic Pelvic Pain in Adult Women

Research Focus for Clinicians

In response to the need for a comprehensive evaluation of the evidence regarding current therapies for chronic pelvic pain (CPP) in adult women, a systematic review assessed the comparative effectiveness of surgical and non-surgical treatments for CPP and the potential harms of non-surgical approaches. This review focused on noncyclic and mixed cyclic/noncyclic CPP, and excluded pain that was associated with dysmenorrhea, dyspareunia, dyschezia, or dysuria. A total of 36 studies published between January 1990 and May 2011 were reviewed. The full report, listing all studies, is available at www.effectivehealthcare.ahrq.gov/pelvicpain.cfm. This summary, based on the full report of research evidence, is provided to assist in decisionmaking along with considering a patient's values and preferences. Reviews of evidence should not be construed to represent clinical recommendations or guidelines.

Background

Although definitions vary, noncyclic CPP is pain that has persisted for more than 3 months, is localized to the anatomic pelvis (lower abdomen below the umbilicus), and is of sufficient severity that it causes the patient to become functionally disabled or seek medical care. For the purpose of the current report, CPP comprised noncyclic and mixed cyclic/noncyclic pelvic pain.

Prevalence estimates of CPP vary and range from 4.0 to 43.4 percent. A thorough clinical assessment to identify an etiology is critical for managing noncyclic CPP. Frequently diagnosed etiologies for CPP include adhesions, irritable bowel syndrome (IBS), interstitial cystitis/painful bladder syndrome (IC/PBS), pelvic congestion syndrome, and pelvic floor muscle spasm; in some cases, a definitive diagnosis is not made. Noncyclic CPP is associated with several physical, psychological, and social factors and comorbidities, all of which have a significant effect on quality of life.

For patients in whom a definite etiology for their CPP has been identified, treatment is frequently based on defined guidelines. The American College of Obstetrics and Gynecology guideline for CPP offers recommendations for pelvic pain associated with endometriosis, dysmenorrhea, adhesions, or pelvic congestion syndrome. Similarly, the American Urological Association and the American College of Gastroenterology have published guidelines for managing pelvic pain associated with IC/PBS and IBS respectively. However, in individuals for whom the etiology is unknown or unclear, CPP is often managed through empirical treatment based on clinician experience and observation; a standard treatment algorithm is lacking. Therapeutic options for noncyclic CPP include surgical and non-surgical (pharmacological or nonpharmacological) approaches. However, the benefits and harms associated with many of these treatment modalities have not been thoroughly investigated. Rationales for selecting one intervention over another when an initial treatment approach fails have lacked guidance from evidence.

Clinical Bottom Line

A uniform definition of CPP and standardized evaluation of study participants are lacking across the literature. Study populations vary widely, and studies may be reporting effects from treating symptoms rather than a diagnosed condition, thus diluting our understanding of treatment effects.

Non-surgical Interventions

Outcome: Pain Status

- Evidence from one RCT* in patients with endometriosis suggested that there was a significantly earlier return of pain with raloxifene than with placebo. ●○○○
- Evidence from one RCT in patients with clinically suspected endometriosis suggested that there was significantly greater reduction in pain with depot leuprolide when compared with placebo. ●○○○
- Evidence was insufficient to permit meaningful conclusions about the relative effectiveness of the following interventions in improving pain status. ○○○○
 - Hormonal therapies except raloxifene or depot leuprolide versus placebo
 - Gabapentin + amitriptyline versus amitriptyline alone
 - Botulinum toxin versus placebo
 - Pelvic ultrasonography plus counseling versus expectant management
 - Pelvic floor muscle therapy versus counseling
 - Photographic reinforcement** versus no reinforcement during postoperative counseling
 - Integrated treatment approach† versus standard treatment††

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Strength of Evidence Scale

- High: ●●● There are consistent results from good-quality studies. Further research is very unlikely to change the conclusions.
- Moderate: ●●○ Findings are supported, but further research could change the conclusions.
- Low: ●○○ There are very few studies, or existing studies are flawed.
- Insufficient: ○○○ Research is either unavailable or does not permit estimation of a treatment effect.

Clinical Bottom Line (Continued from front)

Non-surgical Interventions

Outcome: Functional Status

- Evidence was insufficient to permit meaningful conclusions about the relative effectiveness of an integrated treatment approach versus standard treatment in improving functional status. ○○○

Surgical Interventions

Outcomes: Pain Status and Quality of Life

- No significant difference was found between LUNA*** and diagnostic laparoscopy for improving pain status. ●○○
 - Evidence from two RCTs (including one with a followup period of 5 years) in patients with endometriosis, adhesions, or pelvic inflammatory disease showed that LUNA was not significantly more effective than diagnostic laparoscopy alone in improving pain scores.
- No significant difference was found between laparoscopic adhesiolysis and diagnostic laparoscopy for improving pain status and quality of life. ●○○
 - Evidence from one RCT in patients with adhesions showed that both laparoscopic adhesiolysis and diagnostic laparoscopy significantly improved pain scores and quality of life at 12 months of followup with no significant differences between the two interventions.
- Evidence was insufficient to permit meaningful conclusions about the relative effectiveness of the following interventions in improving pain status. ○○○
 - Surgical versus non-surgical therapy
 - LUNA versus uterosacral ligament resection

Outcome: Functional Status

- Evidence was insufficient to permit meaningful conclusions about the relative effectiveness of hysterectomy versus non-surgical therapy for improving functional status. ○○○

* RCT = randomized controlled trial. **Photographic enforcement = displaying operative photographs. *** LUNA = laparoscopic uterosacral nerve ablation.

† Integrated treatment approach = equal attention devoted to organic, psychological, dietary, and environmental causes of pain; laparoscopy not routinely performed.

†† Standard treatment = exclusion of organic causes of pain and routine laparoscopy before attention is devoted to treating other causes.

Strength of Evidence Scale

- High: ●●● There are consistent results from good-quality studies. Further research is very unlikely to change the conclusions.
Moderate: ●●○ Findings are supported, but further research could change the conclusions.
Low: ●○○ There are very few studies, or existing studies are flawed.
Insufficient: ○○○ Research is either unavailable or does not permit estimation of a treatment effect.

Conclusions

A thorough workup that includes gynecological, gastrointestinal, urological, and/or psychological assessments may be required in patients with CPP, given the various possible etiologies for this condition.

In patients with CPP where endometriosis is suspected, hormonal therapy may be beneficial, although evidence cannot be extrapolated to patients without clinically suspected endometriosis. Among surgical approaches for CPP, both laparoscopic uterosacral nerve ablation and adhesiolysis were not found to be superior to diagnostic laparoscopy in improving pain.

Available evidence is insufficient to change current approaches to care. For this reason, use of less-invasive diagnostic and therapeutic interventions may be warranted before moving on to those that are more invasive and could be associated with increased harms. This approach may be warranted, particularly in situations where the patient is comfortable not having a definitive diagnosis.

Improved characterization of the targeted condition, intervention, and population in CPP research is necessary to inform treatment choices for this commonly reported entity. Additionally, there is an urgent need to address gaps in knowledge regarding decisionmaking for this condition.

Gaps in Knowledge

- There are very few data on outcome measures such as quality of life, functional status, and patient satisfaction.
- The evidence on hormonal therapies for noncyclic CPP not related to endometriosis is limited.
- There is a paucity of noncyclic CPP studies evaluating nonhormonal and nonpharmacological interventions and comparing medical and surgical management.
- Prevalence estimates of noncyclic CPP-associated comorbidities (such as dyspareunia, dysmenorrhea, IBS, and major depressive disorder) are widely variable.
- There is limited understanding of the role of a multidisciplinary approach in managing noncyclic CPP despite its complex etiology and association with psychosocial factors.

What To Discuss With Your Patients

- The different types of interventions available for treating noncyclic CPP.
- The uncertainty about therapies for noncyclic CPP.
- The types of comorbidities and factors (including psychosocial) that might be associated with noncyclic CPP and the importance of these in deciding about treatment.
- The possibility that a definitive cause of the patient's noncyclic CPP may not be identified, making the treatment process complex.
- Encouraging the patient to work with you to identify an optimal approach to manage the condition.

Resource for Patients



Treating Chronic Pelvic Pain, A Review of the Research for Women is a companion to this clinician research summary. It can help adult women with noncyclic CPP talk with their health care professional about the various treatment approaches for managing their pain.

Ordering Information

For electronic copies of *Treating Chronic Pelvic Pain, A Review of the Research for Women*, this clinician research summary, and the full systematic review, visit www.effectivehealthcare.ahrq.gov/pelvicpain.cfm. To order free print copies, call the AHRQ Publications Clearinghouse at 800-358-9295.

Source

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