

Endometriosis: Acute and Chronic Pain in Women

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I have no disclosures



Endometriosis is a common cause of chronic and acute pain in females.

An estimated 71-85% of chronic pain is believed to be derived from endometriosis

6-10% of reproductive aged women report symptoms suggestive of endometriosis

The burden of disease represented by endometriosis has been increasingly recognized as an area of intense research and public awareness

The evaluation, diagnosis and treatments both pharmacologic and non-pharmacologic will be discussed

ACOG has recently updated its guidelines regarding the diagnosis, evaluation and treatment of endometriosis

Endometriosis is

The presence of endometrial tissue outside of the uterus

Adnexa, bowel, bladder, peritoneal cavity are frequent locations for ectopic endometrial tissue to inhabit.

Why is this a problem?

Ectopic endometrial tissue directly leads to an inflammatory state through several processes

Increased prostaglandin production through activity of COX-2

Greater quantity of TNF alpha, IL 1, 6,8 within peritoneal fluid

Evaluation of endometriosis

Dysmenorrhea

Dysuria with menses

Dyspareunia

Pain with defecation
during or onset of
menses

Diarrhea with menses

Generalized
abdominopelvic pain

Sacral back pain at or
around menses

These symptoms share similarities with other etiologies such as:

IBS

Abdominal wall syndrome

Pelvic congestion syndrome

Musculoskeletal disorders

Interstitial cystitis

Physical exam

Tenderness along
sacral spines

Vaginal vault
tenderness

Adnexal tenderness

Pain along prior
cesarean incision

Umbilical pain

Pain journals are also a useful tool to assess patterns in associated with pain

Descriptors such as sharp, stinging, and stabbing are frequently used to describe pain associated with endometriosis

Pain associated with endometriosis has both neuropathic and nociceptive aspects

A 2021 study published in Frontiers Pain Research from Coxon et. Al directly evaluated the nature of pain associated with endometriosis

35% of subjects had identifiers suggestive of both types of pain

Neuropathic pain was also worsened in those with multiple surgeries

Further evaluation

This generally includes imaging beginning with transvaginal ultrasound (TVUS).

Identification of endometriomas (chocolate cysts) can be seen by this method

Finding individual lesions can remain elusive

MRI is also used for detection of endometriosis, especially lesions infiltrating the pelvic sidewall.

What are common symptoms of endometriosis?

Previous guidelines such as ACOG Practice bulletin #114 published in 2010 and updated in 2018 along with standard texts of gynecology state that surgical diagnosis with biopsy is the definitive method for diagnosis

Visualization of endometriosis via laparoscopy is also an accepted method of confirmation

Lesions associated with endometriosis have multiple different presentations.

Deep infiltrating endometriosis may not be visualized without dissection into the pelvic sidewall

Economic cost



The similarities between symptoms and other etiologies combined with the need for laparoscopy for definitive diagnosis has led to an average diagnosis to treatment time of 6-11 years.

Simoens et al estimated in a 2002 study of the economic burden of endometriosis that 22 billion dollars were spent

17.3 billion in hospital
expenses

4.7 Billion indirect cost

A new approach

ACOG practice bulletin #111 published in Feb 2026
updates and revises the management of
endometriosis in several areas

Surgery is no longer needed to establish diagnosis of endometriosis

Clinical symptoms, physical exam, imaging studies, patient history can be used to not only make a diagnosis but initiate treatment for endometriosis.

- By taking this approach, surgical evaluation is becomes more reserved for cases of treatment failures, lack of improvement in symptoms or worsening of disease.

Treatment

NSAIDs

- Work on decreasing inflammatory mediators
- First line therapy

Hormones

Combined oral
contraception pills

Levonorgestrel IUDs

Transdermal birth
control methods

Progestin oral pills

GnRH agonists

Progestin depot
injections

Non-hormonal pharmacotherapy

SNRI

Gabapentin

SSRI

Pregabalin

TCA

Muscle relaxers

Non-Surgical Treatment

Pelvic physical floor therapy

Acupuncture

Acupuncture and other features of Chinese and Eastern medicine have been utilized for treatment of chronic pelvic pain

In a 2020 meta analysis by Giese et.al an overall benefit was found from use of acupuncture in study participants

Techniques include

Muscle energy

Dry needling

Myofascial release

Myofascial acoustic
compression

Electrical stimulation

Biofeedback

Mechanisms of relief are believed to work through reduction of inflammatory mediators

In a separate meta-analysis acupuncture was found to decrease the circulation level of estrogens (5)

Mental Health

Cognitive based therapy

Support Groups

References

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ACOG Practice Bulletin #11 Feb 2026

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Questions?