

EARLY CLINICAL
DIAGNOSIS AND
TREATMENT OF
ENDOMETRIOSIS, PAINFUL
MENSTRUAL PERIODS AND
PELVIC PAIN IS
IMPORTANT TO IMPROVE
QUALITY OF LIFE, REDUCE
PAIN AND ENSURE
REPRODUCTIVE
POTENTIAL.



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References:

- 1.M.L. Ballweg, Big picture of endometriosis helps provide guidance on approach to teens: comparative historical data show endo starting younger, is more severe, J. Pediatr. Adolesc. Gynecol., 16 (3 Suppl) (2003), pp. S21-26
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ENDOMETRIOSIS

For adolescents

SYMPTOMS

- Chronic pelvic pain and cyclic and/or noncyclic painful period that are not responsive to pain relievers (NSAIDs) or birth control
- Pain with sex
- Bladder and bowel pain
- Constipation/diarrhea
- Nausea/bloating
- Severe fatigue, anxiety/depression

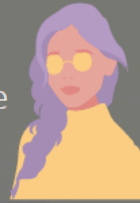
RISK FACTORS

- Genetics/family history of painful periods of endometriosis
- Early first period (prior to 12 years old)
- Low BMI*
- Exposure to environmental chemicals
- Passive smoking exposure



*People with higher BMI are less commonly diagnosed with endometriosis, but symptoms are more severe when they are diagnosed [5].

38% of women with endometriosis started experiencing period pain before 15 years of age. [1] The youngest was documented at the age of eight. [2]



Teenagers with endometriosis on average wait for **4.6 years** before seeking advice and another **4.7 years** before finally being diagnosed. [3]

67-73% of adolescents with pain that does not respond to pain relievers (NSAIDs) or birth control pills have endometriosis. [4]

CURRENT TREATMENT

NON-HORMONAL THERAPY

Pain relievers (Non-steroidal anti-inflammatory drugs) such as ibuprofen or naproxen sodium

HORMONAL THERAPY

1. Hormonal contraceptives (birth control pills, patches, etc).
2. Levonorgestrel IUD
3. GnRH analogues (should only be given to individuals over 18 years old with hormonal add back therapy)

SURGICAL EXCISION

Complete laparoscopic excision may significantly reduce the recurrence rates of endometriosis in adolescents

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Endometriosis

for
Adults

2020

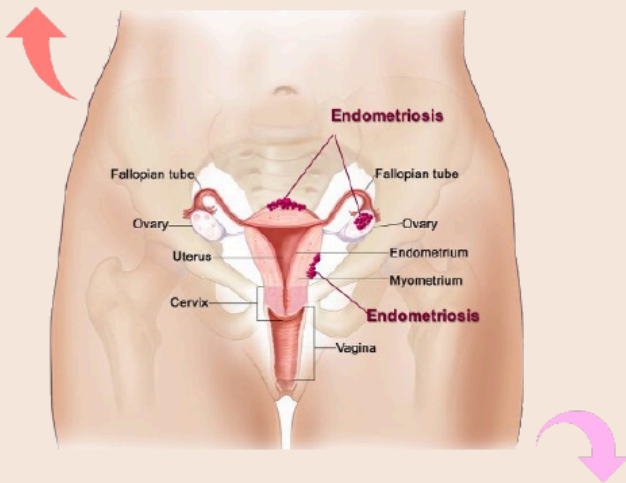


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What is Endometriosis

Endometriosis is a chronic disease where endometrial-like tissue (similar to the type that lines your uterus) grows outside of the uterus and other organs in your abdomen, and causes inflammation, scarring, damage to nearby structures, intense pain, and even infertility.^{1,2,3}



Some Facts about Endometriosis

- The cause of endometriosis is not known.
- Endometriosis affects 1 in 10 menstruating people.
- Endometriosis often runs in families; therefore a genetic component is suspected.
- Endometriosis is not purely painful periods.
- There is no prevention for endometriosis, but treatments can help.

Symptoms

Daily Function: Endometriosis can affect the ability to go to work or perform at your best due to pain. Many patients report difficulties with attendance, work productivity, or even day-to-day activities⁴

Mood Change: Mood problems can develop due to endometriosis with 29% of patients reporting anxiety or depression⁵

Recurrent, crampy, pelvic pain occurring just before or during menses and lasting two to three days; pain may radiate into the lower back and thighs, and may be associated with nausea, fatigue, bloating, and general malaise⁶

History of noncyclic pelvic pain for at least six months. Pain becomes more frequent, often daily, and may begin to affect other nearby organs

Deep pelvic pain during intercourse. This typically occurs with deeper penetration, and certain positions may be more painful. Pain may also occur after sex and last hours to days

About 30-50% of patients experience infertility, and women with infertility have a 6 to 8 times higher risk of having endometriosis than fertile women²

Patients with endometriosis may have very heavy periods starting when they are teenagers

Endometriosis growing on or around the bladder can cause pain. Sometimes endometriosis will cause the muscles in the pelvis to become irritable, and this can also cause bladder pain

Irritable bowel symptoms can be caused by endometriosis growing on the bowel or the nerves nearby. Not all cases of IBS are caused by endometriosis, however.



depression



menstrual cramps



chronic pelvic pain



painful intercourse



infertility



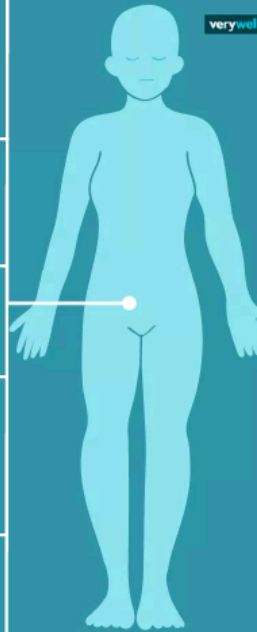
heavy menstruation






painful urination



constipation and/or diarrhea







Diagnostics

-  Diagnostic ability
-  Cost
-  Operator Dependence







Pelvic Exam

-  for **deep** endometriosis
-  for **peritoneal** endometriosis
-  highly operator-dependent
-  low cost







Ultrasound

-  for **deep** endometriosis
-  for **peritoneal** endometriosis
-  highly operator-dependent
-  normal cost






Magnetic Resonance Imaging (MRI)

-  for **deep** endometriosis
-  for **peritoneal** endometriosis
-  highly operator-dependent
-  high cost



Laparoscopy

-  for **almost any** endometriosis
-  highly operator-dependent
-  extremely high cost (but may lead to improvement in symptoms)

Treatment

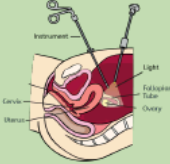


Medical Treatment


- **Description:** Different types of birth control to stop periods, and pain medications to manage symptoms
- **Advantage:** Cheap, low risk, may control symptoms
- **Disadvantage:** Does not get rid of endometriosis, cannot get pregnant while using.
- **Examples:** Pills, patch, vaginal ring, injections, and IUD


Surgery

- **Description:** Laparoscopic surgery to remove endometriotic tissue, and normalize or improve the anatomy
- **Advantage:** Can both improve fertility and alleviate pain.
- **Disadvantage:** Endometriosis often comes back, and surgery may lead to extra scar tissue






Risk Factors

Earlier age at first period:  < 12 years¹

Shorter menstrual cycles :  < 26 days¹

Reproductive history: Infertility 

Body type: Thinner people 

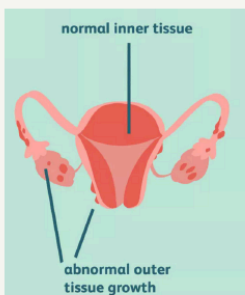
Diet: Higher risk for those eating highly processed foods (lower risk in vegetarians) 
 · Anti-inflammatory diets may decrease the risk 

What is it

Endometriosis is a chronic disease where the endometrial-like tissue (similar to the uterus lining) grows outside of the uterus and other organs in your abdomen and causes inflammation, scarring, damage to nearby structures, intense pain and even infertility. ^[1]

It may affect up to 2-5% of ^[1] postmenopausal women. Typically these women have had symptoms all of their lives that were not recognized or ignored.


The risk of ovarian cancer can increase in women with endometriosis. However, this is very rare.



Risk with Post-Menopausal Endometriosis

1. Endometriosis does not completely go away with menopause or removal of the ovaries, though symptoms may improve. ^[2]
2. Immunosuppression allows lesions to establish and progress. ^[3]
3. Use of hormone replacement therapy can re-activate ^[4] endometriosis symptoms.
4. Women with endometriosis may be at a slightly higher risk of ovarian cancer. ^[1]
5. Treatments can give back quality of life!

Symptoms

1. Pelvic pain \geq 6 months
2. Unbearable pain during intercourse
3. Painful bowel movements
4. Painful urination
5. Chronic fatigue 
6. Low back pain
7. Diaphragm/lung pain

Women may have had these symptoms throughout their lives, and endometriosis is unlikely to develop newly in postmenopausal women.





Diagnosis & Treatments^{[5], [6]}

The Diagnosis

1. Pelvic Exam, Ultrasound, or MRI
2. **Laparoscopy** - Gold standard minimally **invasive** diagnostic procedure allowing the doctor to see and remove disease.

Treatment 1: Discontinue HR Treatment

The hormone replacement would be discontinued if it reactivates symptoms.

Treatment 2: Stepwise Surgery

Laparoscopy is typically used to remove the endometriosis lesions or scar tissue.

Hysterectomy can be reserved for select cases in which the disease and the uterus are both excised.

Recurrence could still happen.

Treatment 3: Aromatase Inhibitor

If recurrence happens after surgery, **aromatase inhibitor** may be an option as they reduce local estrogen biosynthesis within the lesions.

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Reference

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Endometriosis

FOR POST-MENOPAUSAL WOMEN

