

Endometriosis

Endometriosis is when tissue like the uterus lining grows in the wrong places—on the ovaries, tubes, or belly—bleeds every cycle, and causes pain and infertility.

THE ONE-LINE TRUTH

Tissue that looks and acts like the lining of the uterus grows outside the uterus, bleeds every month with your period, and causes pain, scarring, and trouble getting pregnant.

The chain — how it unfolds

1. Endometrial-like tissue implants outside the uterus — why: Cells that should only grow inside the uterus land on the ovaries, tubes, or pelvic lining—likely from blood flowing backward during periods, cells transforming, or spreading through blood vessels—and start growing there.
2. Tissue bleeds every menstrual cycle — why: The misplaced tissue responds to estrogen and progesterone from the ovaries, swells, and then bleeds during your period just like the lining inside the uterus, but the blood has nowhere to go and sits trapped.
3. Trapped blood irritates surrounding tissue — why: Blood pooling in the pelvis triggers inflammation—immune cells rush in, release chemicals that cause pain and swelling, and try to clean up the blood, but this happens every single month.
4. Scar tissue and adhesions form — why: The body tries to heal the irritated spots by laying down scar tissue (fibrosis) and sticky bands (adhesions) that glue organs together, distorting anatomy and trapping organs in fixed positions.
5. Fallopian tubes or ovaries get blocked or stuck — why: Adhesions can kink or block the fallopian tubes, or bury the ovaries in scar tissue, making it hard for eggs to travel or be released, which causes infertility.
6. Chronic pelvic pain develops — why: Repeated inflammation, scarring, and nerve irritation lower the pain threshold (sensitize nerves), causing deep, aching pain during periods, sex, bowel movements, or even between periods.
7. Deep infiltrating disease invades organs — why: In severe cases, endometrial tissue burrows deep into the bowel, bladder, or uterosacral ligaments (the ligaments that hold the uterus in place), causing pain with pooping, blood in stool or urine, and bowel or bladder obstruction.

8. Quality of life declines — why: The combination of chronic pain, painful sex, infertility, fatigue from ongoing inflammation, and repeated surgeries or treatments wears down physical and emotional well-being, affecting work, relationships, and daily life.

Spot it — what you see, and why

- Pelvic pain that gets worse during your period: Tissue that normally lines the inside of the uterus (called endometrium) grows in spots outside the uterus where it does not belong — like on the ovaries, bowel, or pelvic walls. Each month, hormones (especially estrogen) make this misplaced tissue swell and bleed just like the lining inside the uterus does, but the blood and swelling have nowhere to go. This trapped blood irritates nearby nerves and causes inflammation (redness and soreness), which triggers pain that spikes when hormone levels are highest during menstruation.
- Pain during or after sex (deep pain with sex (dyspareunia)): When endometriosis tissue grows on the ligaments behind the uterus (the uterosacral ligaments) or on the back wall of the vagina, pressure from intercourse stretches or tugs those inflamed, stuck-down spots. The tissue is already irritated and scarred, so any movement or touch sends sharp pain signals from those nerves.
- Heavy or irregular menstrual bleeding: Endometriosis lesions release inflammatory chemicals (cytokines and prostaglandins) that can interfere with the normal shedding and repair of the uterine lining. In some cases, endometriosis also grows into the muscle wall of the uterus itself (a related condition called adenomyosis), which makes the uterus contract harder and bleed more heavily during periods.
- Trouble getting pregnant (infertility): Endometriosis can damage or block the fallopian tubes with scar tissue (adhesions), trap the egg inside a cyst on the ovary (called an endometrioma or chocolate cyst because old blood turns dark brown), or create an inflamed environment in the pelvis that harms sperm and egg quality. All of these make it harder for sperm to meet the egg and for a fertilized egg to implant in the uterus.
- Painful bowel movements or blood in the stool during your period: Endometriosis tissue can grow on the outside (or sometimes the inside) of the bowel (intestines). When hormones cause that tissue to swell and bleed each month, the bowel wall becomes inflamed and tender. Passing stool stretches the inflamed spot, triggering pain. If the lesion erodes deep enough, it can cause bleeding into the bowel that shows up in the stool.
- Painful urination or blood in the urine during your period: Endometriosis tissue can grow on the bladder wall. During menstruation, hormones make that tissue swell and bleed, irritating the bladder lining. When the bladder fills and stretches, or when it squeezes to push out urine, it presses on the inflamed endometriosis spot and causes pain. Deep lesions can bleed into the bladder, causing blood in the urine (hematuria).

Red flags — act now

- Severe, sudden pelvic pain that does not go away — may mean an endometriosis cyst on the ovary has ruptured or twisted (ovarian torsion), cutting off blood supply and causing tissue to die
- Blood in the stool or urine during your period, or painful bowel movements that make you unable to pass stool — may mean endometriosis has grown deep into the bowel or bladder wall and needs urgent evaluation
- Trouble getting pregnant after one year of trying (or six months if you are over 35) — endometriosis is a common hidden cause of infertility and needs specialist evaluation and treatment

Treat it — in this order

1. Nonsteroidal anti-inflammatory drugs (NSAIDs) like ibuprofen 400–800 mg or naproxen 220–500 mg during the period → Blocks prostaglandins (chemicals the bleeding tissue makes that cause swelling and pain) — this turns down the pain signal and reduces cramping during the period.
2. Combined oral contraceptive pills (estrogen plus progestin) or progestin-only pill, patch, or IUD (like levonorgestrel IUD) → Stops or lightens the monthly hormone surge from the ovaries, so the misplaced tissue does not swell and bleed as much each month — fewer bleeds mean less pain and slower tissue growth.
3. GnRH agonist (like leuprolide) or GnRH antagonist (like elagolix) → Shuts down the pituitary gland (the control tower at the base of the brain) so it stops telling the ovaries to make estrogen and progesterone — this starves the endometriosis tissue and shrinks it like a plant without water.
4. Laparoscopic excision or ablation surgery (cutting out or burning the tissue spots) → The surgeon looks inside with a tiny camera, cuts out or burns away the patches of tissue, and frees up organs glued together by scar tissue — this removes the source of bleeding and pain right at the spot.
5. Fertility treatments like in vitro fertilization (IVF) or intrauterine insemination (IUI) → Bypasses the scarred fallopian tubes and hostile uterus environment by mixing sperm and egg outside the body (IVF) or placing sperm directly into the uterus (IUI) — this gives the couple a way to get pregnant even when the natural path is blocked.

Your top priorities at the bedside

1. Assess pain level using a 0 to 10 scale and ask when pain happens in relation to the menstrual cycle. — why: Endometriosis pain follows estrogen (female hormone) peaks, so tracking the timing separates it from non-cyclic conditions and measures treatment success.
2. Check vital signs including temperature and blood pressure to rule out infection or internal bleeding. — why: Fever suggests pelvic inflammatory disease instead of endometriosis, and low blood pressure with fast heart rate may signal a ruptured endometrioma with bleeding into the abdomen.
3. Give nonsteroidal anti-inflammatory drugs like ibuprofen 400 to 800 milligrams every 6 to 8 hours for pain control. — why: These drugs block prostaglandins (chemicals that cause uterine cramping and inflammation), reducing both the pain and the inflammatory response from endometrial tissue.