

ENDOMETRIOSIS PAIN TREATMENT LANDSCAPE

Endometriosis occurs when endometrium —tissue that normally lines the uterus— grows outside the uterus where it does not belong, and forms what is called a lesion. The lesions may swell and bleed in the same way the lining inside of the uterus does during your menstrual period, causing pain. Estrogen fuels the growth of these lesions, and so, lowering estrogen levels may help reduce endometriosis pain. There is no cure for the disease, but there are treatment options to manage your pain associated with endometriosis.¹

Deciding which endometriosis treatment is right for you can feel overwhelming. The best treatment for you depends on your most bothersome symptoms, and can be different based on where you are on your endometriosis journey. Each treatment has benefits and drawbacks. Understanding your medical and surgical management options will help you select the best option(s) to achieve your current treatment goals.²



TREATMENT CLASS	+ DESCRIPTION	! RISKS	i BENEFITS
MEDICAL TREATMENT			
PAIN RELIEVERS	<p>Nonsteroidal anti-inflammatory drugs (NSAIDs): A class of pain medicine that decreases the production of pain-producing chemicals (called prostaglandins), which can help to relieve the painful cramps associated with endometriosis^{2,3}</p>	<ul style="list-style-type: none"> • Increased risk of heart attacks or stroke • Possible bleeding in the stomach • Potential skin reactions such as skin reddening, rash, or blisters^{3,4} 	<ul style="list-style-type: none"> • Many are available over-the-counter and can be easily obtained without a prescription³ • Can be combined with other medical therapies²
COMBINED HORMONAL CONTRACEPTIVES	<p>Using a combination of an estrogen and a progestin can control the menstrual cycle and reduce or stop menstrual bleeding⁵</p>	<ul style="list-style-type: none"> • May increase risk of heart attacks, stroke, deep-vein blood clots in some women² • Headache, nausea, breast tenderness, irregular bleeding/spotting⁶ 	<ul style="list-style-type: none"> • Can make your periods lighter, shorter, and can reduce endometriosis pain • Provide contraception • Work best in women who have pain during their period²
PROGESTINS	<p>Medications containing a synthetic form of progesterone to decrease endometriosis pain and can reduce or stop menstrual bleeding⁷</p>	<ul style="list-style-type: none"> • Progestins generally all have similar hormonal side effects related to metabolism and mood changes (headache, nausea, weight gain, breast tenderness, irregular bleeding). Individual reactions to progestins can differ depending on type⁷ • Endometriosis tissue may not always respond to progestins due to progesterone resistance⁸ 	<ul style="list-style-type: none"> • Hormonal medication alternative for women who do not wish to or cannot take estrogens⁵ • Provide contraception • Can make your periods lighter, shorter, and can reduce endometriosis pain²
	<p>Progestins are available in various forms carrying different types of progestin²:</p>	<p>Progestin-only pills</p> <ul style="list-style-type: none"> • Progestin hormone side effects as listed above⁹ 	
	<ul style="list-style-type: none"> • Progestin-only pills • Injection/shot (medroxyprogesterone acetate depot) • Intrauterine device (IUD) containing levonorgestrel • Implant: A small single rod releasing etonorgestrel that is inserted just under the skin in the upper arm 	<p>Injection/shot</p> <ul style="list-style-type: none"> • Associated with bone loss • Progestin hormone side effects as listed above⁷ • May take several months to return to a normal cycle after stopping an injectable progestin¹⁰ 	
		<p>IUD</p> <ul style="list-style-type: none"> • Irregular bleeding • IUD may fall out of the uterus partially or completely¹¹ 	
GnRH ANTAGONISTS	<p>GnRH antagonists dial estrogen levels down and the degree of estrogen reduction is dependent on dose¹³</p>	<ul style="list-style-type: none"> • Common side effects include mild to moderate hot flashes or night sweats, headache, nausea, difficulty sleeping, absence of periods, anxiety, joint pain, depression, and mood changes^{13,14} • Because this class of medication works by lowering estrogen, it can also cause bone loss¹⁴ • Can be used for a limited amount of time, up to 24 months • May change pattern of periods, making it hard to tell if pregnancy has occurred/if pregnant¹³ 	<ul style="list-style-type: none"> • Reduce endometriosis pain symptoms (painful periods, pelvic pain in between periods, and pain with sex); may stop your periods¹⁴ • Menstrual periods return within 1 month for most women after stopping the medication¹³

TREATMENT CLASS	DESCRIPTION	RISKS	BENEFITS
MEDICAL TREATMENT			
GNRH AGONISTS	<p>GnRH agonists first increase estrogen levels before completely blocking the production of estrogen, preventing ovulation and stopping menstrual flow¹⁵</p>	<ul style="list-style-type: none"> • Common side effects include hot flashes, vaginal dryness, decreased sex drive, difficulty sleeping, mood swings, and bone loss over time^{15,16} <ul style="list-style-type: none"> • Side effects may be reduced or minimized with addition of ‘add-back’ hormonal therapy • Initial treatment can be used for a limited amount of time, up to 6 months <ul style="list-style-type: none"> • Duration of use may be extended with the addition of ‘add-back’ hormonal therapy¹⁵ • Menstrual periods may take up to 10 weeks to return after stopping the medication¹⁷ 	<ul style="list-style-type: none"> • Reduce endometriosis pain and bleeding; may stop your periods¹⁷
SURGICAL TREATMENT			
EXCISION/ ABLATION SURGERY	<p>Ablation - burns endometrial lesions using a high energy heat source such as a laser²</p> <p>Excision - cuts away endometrial lesions²</p> <p>These procedures attempt to reduce endometriosis-associated pain by removing all visible endometriosis lesions and scar tissue without harming the healthy tissue around it²</p> <p>Surgical approaches include²:</p> <ul style="list-style-type: none"> • Laparoscopy • Robotic-assisted laparoscopy • Laparotomy (open abdominal surgery) 	<ul style="list-style-type: none"> • Endometriosis lesions and pain often return • Risks related to the procedure and anesthesia² 	<ul style="list-style-type: none"> • Can effectively reduce pelvic pain • Compared to hysterectomy (removal of uterus), this type of procedure preserves fertility for women who may desire pregnancy • Lower risk of complications compared to hysterectomy²
HYSTERECTOMY	<p>Surgical removal of the uterus. If needed, the cervix, ovaries, and fallopian tubes may also be removed²</p> <ul style="list-style-type: none"> • Hysterectomy is generally considered for women with endometriosis who have not experienced pain relief from medical treatment or less invasive surgeries • Hysterectomy can be appropriate for women who do not wish to become pregnant <p>Surgical approaches include²:</p> <ul style="list-style-type: none"> • Laparoscopy • Robotic-assisted laparoscopy • Laparotomy (open abdominal surgery) 	<ul style="list-style-type: none"> • Risks of removing ovaries: Sends the body into a full menopausal state, and is associated with menopause symptoms such as hot flashes. Early surgical menopause can increase the risks of osteoporosis, heart disease, and death at a younger age² • Considered a major surgery associated with short- and long-term complications, some of which may not show up until a few days, weeks, or even years after surgery¹⁸ • Risks related to the procedure and anesthesia • Removing the uterus is not reversible and means that you can no longer become pregnant • Slight chance that endometriosis symptoms and lesions may come back² 	<ul style="list-style-type: none"> • Removal of estrogen (produced by the ovaries) can help reduce endometriosis symptoms¹⁹ • Least likelihood of recurrence of disease, and of symptom recurrence, as long as the surgeon excises all existing lesions²

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