

A Practitioners Guide to Cannabis as a Treatment Option for Endometriosis



A Look at the Current Endometriosis Landscape

Endometriosis is a chronic disease associated with severe, life-impacting pain during periods, sexual intercourse, chronic pelvic pain, and sometimes depression, anxiety, and infertility.

10-15%

Studies estimate about 10-15% of reproductive-age individuals assigned female at birth are affected by endometriosis.¹

70%

Prevalence of endometriosis in symptomatic referral population is much higher and is present in up to 70% of women & adolescents with pelvic pain.¹

10 Years

It often takes women on average 10 years to get a diagnosis, and diagnosis is difficult due to variability in clinical presentation and overlap with other conditions.^{1,2}

1.8 Billion

Endometriosis costs Canadian society ~1.8 billion dollars annually.²

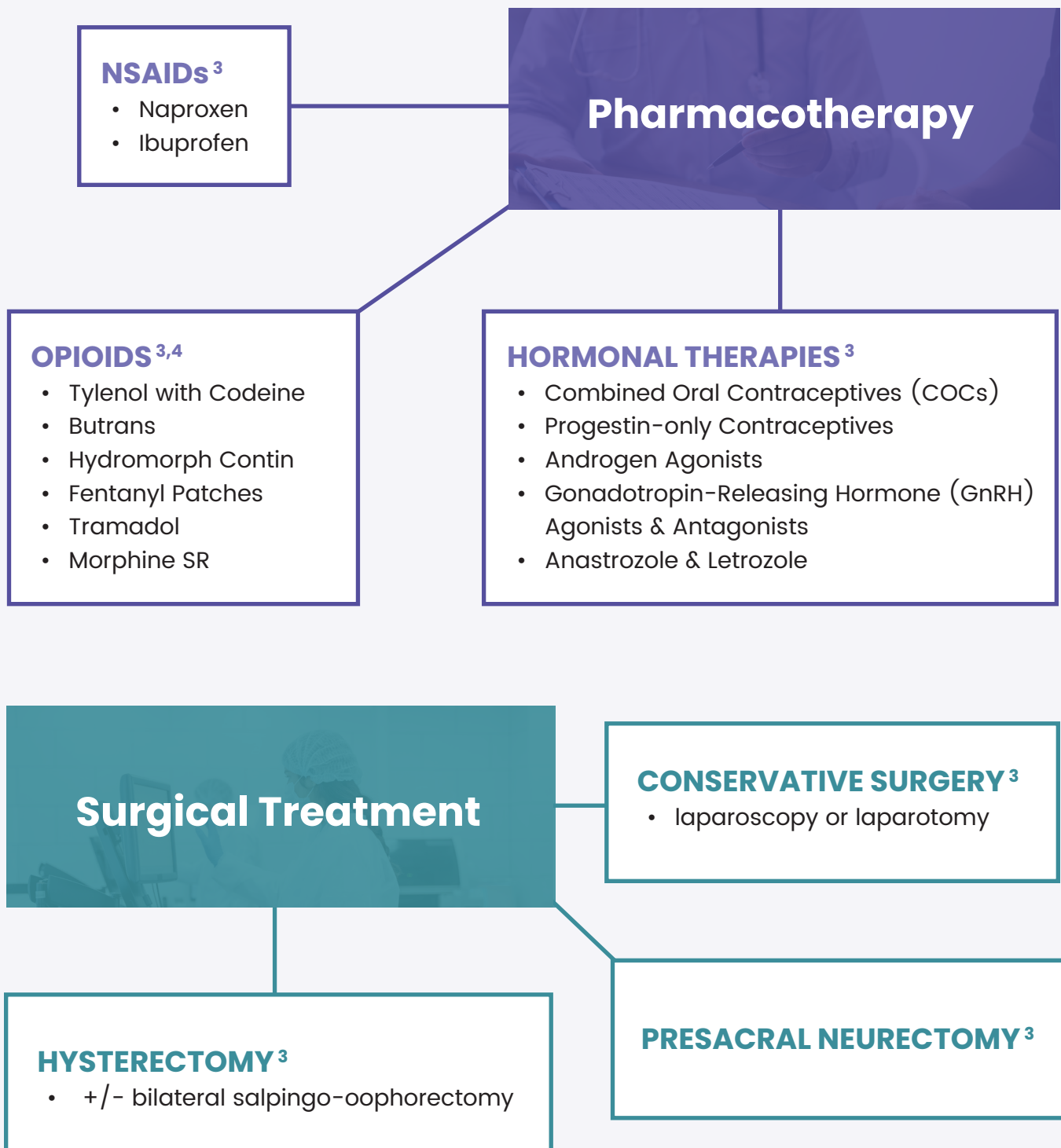
No Cause/No Cure

There is no definitive cause and no cure for endometriosis.²

Often Dismissed

Pain with menstruation is often normalized and dismissed by doctors & the general population leading to delays in diagnosis.²

Current Treatment Options for Endometriosis



How Effective are our Current Treatments?



Efficacy of NSAIDs for endometriosis have not been thoroughly studied and they are only considered first line due to their established efficacy for dysmenorrhea.³

NSAIDs however, can be very harmful to the stomach which should not be taken lightly secondary to the high comorbidity of IBS in endometriosis patients.^{5,6}



While effective for severe pain relief, opioids come with several challenges including but not limited to: constipation, drowsiness, tolerance, risk of overdose & dependence.⁴



Moderate quality evidence exists to indicate effectiveness of COCs for decreased pelvic pain in endometriosis (decrease in pain in 75-100% of patients).¹

However, COCs come with many side effects including but not limited to: irregular bleeding, weight gain, increased risk of blood clots, nausea, mood disturbances, suicidal ideation, nervousness, migraine, dizziness, decreased libido.⁷

66%

Conservative surgery will only provide pain relief for 66% of patients for at least 1 year.¹

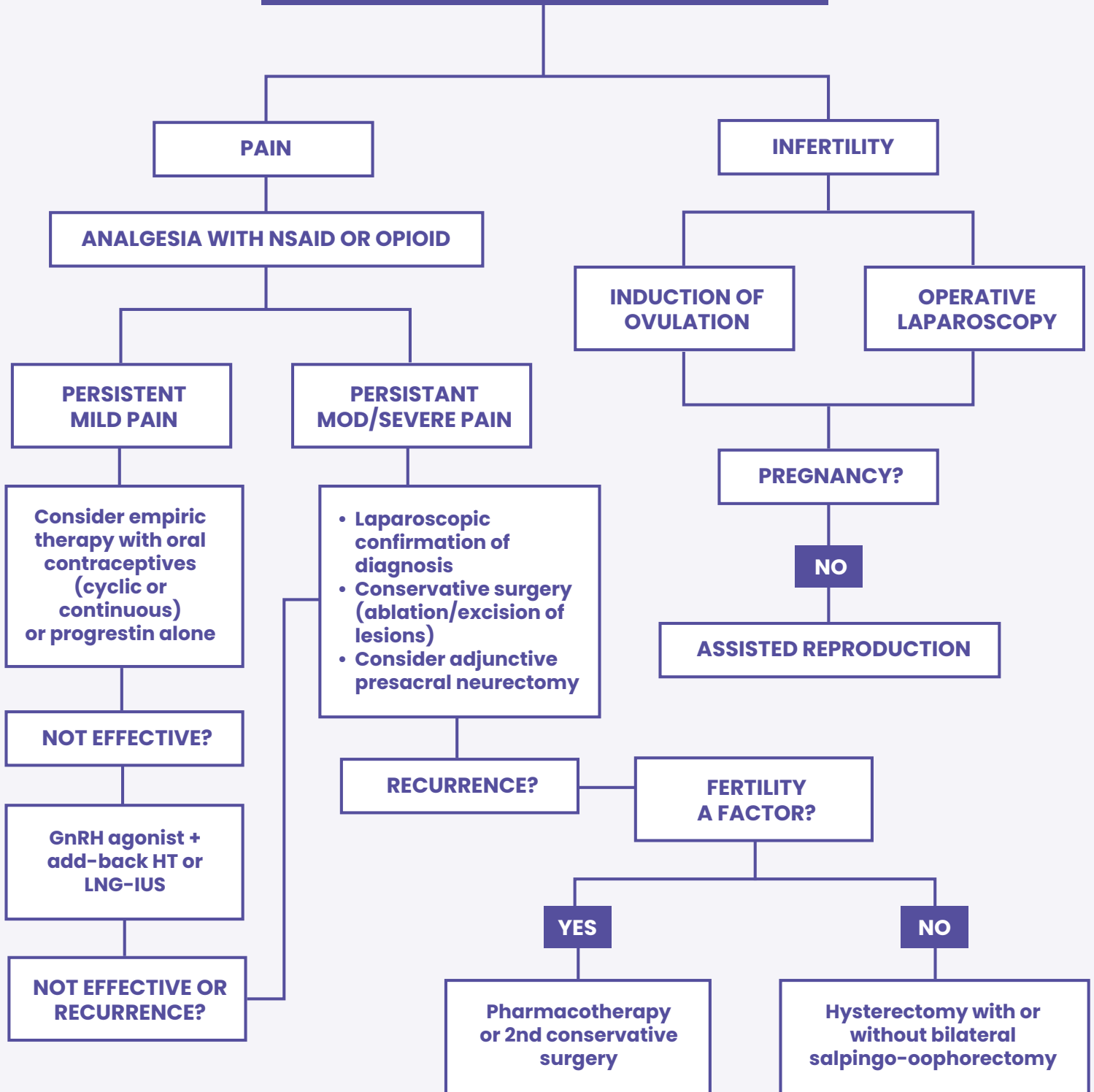
10%

In women who underwent a hysterectomy with bilateral salpingo-oophorectomy, 10% had recurrent symptoms and 3.7% required further surgery.¹

62%

A hysterectomy with ovarian conservation has shown that 62% of patients will have recurrent symptoms in 4 years.¹

Endometriosis Management BASED ON PELVIC PAIN OR INFERTILITY



Abbreviations: GnRH— Gonadotropin-releasing Hormone; HT— Hormone Therapy; LNG-IUS—Levonorgestrel Intrauterine System; NSAID— Nonsteroidal anti-inflammatory drug

ECS and Cannabis – The Basics

The endocannabinoid system is defined as an important widespread neuromodulatory system that influences the central nervous system, development, synaptic plasticity and how the body responds to endogenous environmental insults.^{8,9}

THE ECS IS MADE OF 3 PARTS:^{8,9}

Cannabinoid Receptors (CB1, CB2, TRP channels, PPAR's) ^{8,9}	Endogenous Cannabinoids (endocannabinoids) such as anandamide & 2-arachidonoyl glycerol (2-AG) ^{8,9}	Enzymes (to synthesize & degrade endocannabinoids) ^{8,9}
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- Exogenous cannabinoids are cannabinoids that are not synthesized in the body and are instead found in nature. The most well-known exogenous cannabinoids are THC & CBD (both originating from the cannabis plant).^{8,9}
- Other cannabinoids of note include CBG & CBN.¹⁰

ECS in the Endometrium

- ECS components are widely distributed in the endometrium throughout the menstrual cycle & the uterus is known to contain the highest concentrations of the endocannabinoid anandamide.^{11,12}
- While the exact role of the endocannabinoid system (ECS) in endometriosis and other pelvic inflammatory diseases is still unclear – we do know that ECS components are widely distributed throughout the reproductive organs and endometrium.^{11,12}
- TRPV1 receptors are upregulated in endometriosis. We know both CBD & THC act on TRPV1 receptors and it is known that TRPV1 receptors play important roles in pain and inflammation.^{11,12}
- Individuals with endometriosis have shown to exhibit higher levels of baseline endocannabinoids compared to individuals without endometriosis.^{11,12}
- Studies have observed a downregulation in CB1 receptors in endometriosis patients (compared to controls), disabling progesterone's anti-inflammatory action through the CB1 receptors.^{11,12}
- CB1 receptors have been observed on neurons that innervate endometriosis lesions pointing to a potential therapeutic target & mechanism of action for cannabis as a form of treatment.^{11,12}

Peak Pharm Labs – Cannabinoid Suppositories

THC AND NO-THC OPTIONS

1:3 Suppositories

10mg THC | 30mg CBD

Active Ingredients: 30mg tetrahydrocannabinidiol (THC) distillate derived, 10mg Cannabidiol (CBD) – isolate derived

Inactive Ingredients: Glycerides, C10-C18 Fatty acids, C10-C1 1,2,3 Propanetriol

0:50 Suppositories

0mg THC | 50mg CBD

Active Ingredients: 0mg THC, 50mg CBD– isolate derived.

Inactive Ingredients: Glycerides, C10-C18 Fatty acids, C10-C1 1,2,3 Propanetriol

Learn more about
cannabis suppositories by
visiting our website:

peakpharmlabs.com



Studies Supporting Medical Cannabis as a Treatment for Gynecological Pain Conditions

ARMOUR 2020 – Illicit Cannabis Usage as a Management Strategy in New Zealand Women with Endometriosis: an online survey¹³

- Surveyed people in New Zealand who were using cannabis & self identified as having a diagnosis of endometriosis or PCOS.
- 81% of respondents indicated that cannabis had changed their normal medication usage & 59% were able to completely stop one of their medications.
- Of the medications that were stopped 66% were categorized as analgesics – most commonly opioids & second most common were NSAIDs
- The study highlighted that 67% of respondents reported inhaling cannabis was the most effective methods of administration out of available options being oral, topical or inhalation.

Bottom Line: while the results are likely inflated since respondents from this group were recruited via a cannabis patient advocacy group it is a good indicator of the potential for cannabis to provide pain relief and benefit to patients with endometriosis.

SINCLAIR 2021 – Effects of Cannabis Ingestion on Endometriosis-associated pelvic pain & related symptoms¹⁴

- Retrospective electronic record-based cohort study from Strainprint users with self reported endometriosis.
- Data analysed from April 2017 – February 2020, pain was the most common symptom being treated.
- Inhalation was the favoured dosage form (likely due to faster onset of effect) however amount of pain relief was not significantly different between inhaled forms and oral forms in this study.
- This study found gastrointestinal symptoms to have the greatest self-reported improvement after use.

LIANG 2022 – Medical Cannabis for Gynecologic Pain Conditions: A Systematic Review¹⁶

- Review of 16 studies that examined cannabinoids for gynecologic pain conditions (chronic pelvic pain, vulvodynia, endometriosis, interstitial cystitis and malignancy)
- Reports of pain relief ranged from 61% to 95.5% across studies.
- Concluded that THC, CBD & endocannabinoid enhancing compounds (PEA) may be effective in alleviating pain in a variety of gynecologic pain conditions.

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