NGN NCLEX 2026 · REPRODUCTIVE / GYNECOLOGIC SYSTEM

Endo*metriosis*

Chronic, estrogen-dependent disorder where endometrial-like tissue grows outside the uterus — a high-yield NCLEX topic spanning pathophysiology, pain management, fertility implications, and hormonal pharmacology.

CLUSTER · WOMEN'S HEALTH

CLINICAL JUDGMENT

HIGH-YIELD · 2026 TEST PLAN

Source transparency: Endometriosis was not present in your uploaded personal notes. This deliverable is sourced from standard **NGN NCLEX 2026 references — Saunders Comprehensive Review (2026), ATI RN Maternal Newborn Nursing (Edition 12), and Lippincott Manual of Nursing Practice** — supplemented by ACOG Practice Bulletin No. 114 (Reaffirmed 2024) and the American Society for Reproductive Medicine (ASRM) clinical guidance for hormonal management.

1 Definition & Overview

FOUNDATION

What it is

A **chronic, estrogen-dependent inflammatory disorder** in which endometrial-like glands and stroma implant and grow *outside* the uterine cavity. The ectopic tissue still responds to monthly hormonal cycles — it thickens, bleeds, and sheds — but the blood has nowhere to drain, producing inflammation, scarring, adhesions, and pain.

Why it matters

Endometriosis is a **leading cause of chronic pelvic pain and infertility** in reproductive-age women. It mimics many other conditions (PID, IBS, ovarian cysts, appendicitis), and average **diagnostic delay is 7–10 years**, making nursing assessment and patient advocacy critical.

~10%

WOMEN OF REPRODUCTIVE AGE

Affects roughly 1 in 10 women between menarche and menopause — and up to **30–50%** of women with infertility.

3–45

TYPICAL AGE RANGE (YEARS)

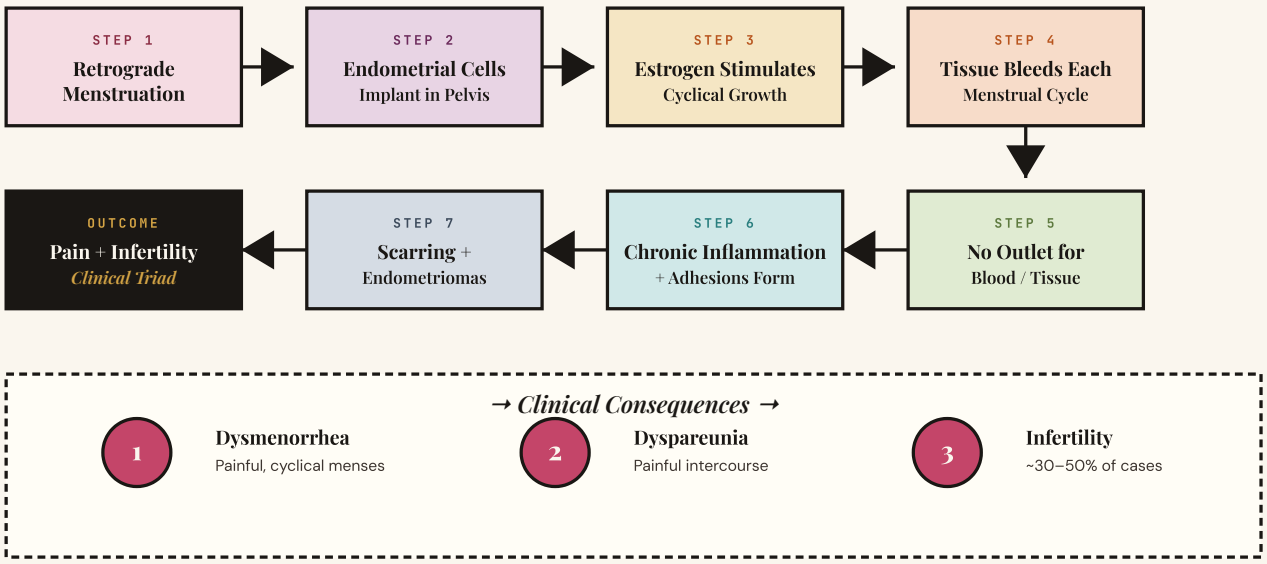
Most often diagnosed between **25–35**, but symptoms commonly begin in adolescence. Symptoms typically regress after menopause when estrogen falls.

- **Most common implant sites:** ovaries (chocolate cysts/endometriomas), uterosacral ligaments, fallopian tubes, pelvic peritoneum, rectovaginal septum, bladder, bowel — rarely, distant sites like lung or surgical scars.
- **Hormone-driven:** ectopic tissue is fed by estrogen; therapies aim to suppress estrogen or oppose it with progestins.
- **Severity ≠ symptoms:** a patient with minimal disease may have severe pain, while extensive disease may be asymptomatic — symptoms do not predict stage.

2 Pathophysiology

MECHANISM

The **leading theory is Sampson's retrograde menstruation:** during menses, some menstrual blood and viable endometrial cells flow backward through the fallopian tubes into the pelvic cavity instead of out through the cervix. Other contributing theories include **coelomic metaplasia** (peritoneal cells transform into endometrial-like cells), **lymphatic / vascular spread**, and **immune dysregulation** that fails to clear the misplaced cells.



3 Signs & Symptoms

RECOGNIZE CUES

★ THE CLASSIC TRIAD ★

Dysmenorrhea · Dyspareunia · Infertility

No. 1

Dysmenorrhea

Painful menses; **cyclical, progressive**, worsens over years. Begins 1–2 days before bleeding and lasts throughout flow.

No. 2

Dyspareunia

Painful intercourse, especially with **deep penetration**; due to implants on uterosacral ligaments or pouch of Douglas.

No. 3

Infertility

Up to 30–50% of women with endometriosis. Caused by adhesions distorting pelvic anatomy and inflammatory effects on ova/sperm.

Common Symptoms

- **Chronic pelvic pain** (non-cyclical, dull, aching)
- **Menorrhagia** — heavy menstrual bleeding
- **Menstrual irregularity** — spotting between periods
- **Dyschezia** — painful defecation, worse with menses
- **Dysuria** — painful urination during menses
- Low back pain that worsens during menses
- Fatigue and low-grade fever
- Bloating, nausea, diarrhea, or constipation cycling with menses

Diagnostic Findings

- **Bimanual pelvic exam:** tender nodules on uterosacral ligaments, fixed retroverted uterus, adnexal tenderness
- **Transvaginal ultrasound:** identifies endometriomas ("chocolate cysts") but cannot detect superficial implants
- **MRI:** useful for deep infiltrating disease
- **CA-125:** may be mildly elevated — *not* diagnostic and not used alone
- **Laparoscopy with biopsy:** GOLD STANDARD — direct visualization + histologic confirmation

Red Flag Findings — Escalate Now

- **Sudden, severe pelvic pain with peritoneal signs** — suspect ruptured endometrioma → surgical emergency
- **Symptoms of bowel obstruction** (vomiting, abdominal distension, absent bowel sounds) — deep infiltrating disease may obstruct rectosigmoid
- **Hematuria or hematochezia** cycling with menses — bladder or bowel wall involvement
- **Hemodynamic instability** (hypotension, tachycardia) with acute pelvic pain — consider hemorrhagic cyst
- **Severe untreated chronic pain** with depression, suicidal ideation — mental health crisis risk

4 Priority Nursing Interventions

TAKE ACTION · ABCS · SAFETY

1

ASSESS

Pain Comprehensively

Use **PQRST** — provocation, quality, region/radiation, severity (0–10 scale), timing in relation to menstrual cycle. Document patterns; pain that cycles with menses is the diagnostic fingerprint.

2

ADMINISTER

Pain Relief — NSAIDs First-Line

Give **ibuprofen or naproxen with food** starting 24–48 hours *before* expected menses for best effect. Inhibits prostaglandin-driven uterine contractions. Add opioids only for breakthrough pain.

3

APPLY

Non-Pharmacologic Comfort

Heat therapy (heating pad, warm bath) to lower abdomen, relaxation techniques, pelvic floor PT, gentle yoga, TENS unit. Position of comfort — often knees-to-chest.

4

MONITOR

Menstrual & Symptom Patterns

Teach the patient to keep a **symptom diary** tracking pain, flow, GI/GU symptoms relative to cycle. Watch for **red flags**: severe acute pain, abnormal bleeding, signs of obstruction.

5

SUPPORT

Psychosocial & Fertility

Chronic pain plus possible infertility creates high risk for **depression, anxiety, relationship strain**. Screen for mood, refer to counseling and support groups. Discuss fertility preservation *early*.

6

EDUCATE

Disease & Treatment Options

Teach that this is a **chronic, manageable condition — not curable**. Review medication regimen, side effects, treatment goals (pain control, fertility, or both). Empower self-advocacy.

7

PREPARE

Pre-Op / Post-Op Laparoscopy

Pre: NPO, consent, baseline VS, void before transfer. Post: monitor for **shoulder pain** (referred CO_2), incision care, early ambulation, pain control, gradual diet advance, no heavy lifting × 1–2 weeks.

8

COORDINATE

Interdisciplinary Care

Collaborate with **gynecology, pain management, reproductive endocrinology, mental health, and pelvic floor PT**. Endometriosis is multi-system and benefits from team-based care.

5 Pharmacology

HORMONAL SUPPRESSION HIERARCHY

DRUG / CLASS	MECHANISM	KEY SIDE EFFECTS	NURSING CONSIDERATIONS
NSAIDs (ibuprofen, naproxen)	Inhibit prostaglandin synthesis → ↓ uterine cramping & inflammation. **First-line for pain.**	GI upset, ulceration, renal impairment, ↑ bleeding risk	Take with food. Start 1–2 days before menses. Avoid in pregnancy (3rd trimester) and renal disease.
Combined Oral Contraceptives (COCs) estrogen + progestin	Suppress ovulation, thin endometrium → ↓ menstrual flow and pain. **Continuous use** may eliminate menses.	Breakthrough bleeding, nausea, breast tenderness, **VTE risk**, HTN	Contraindicated in smokers > 35, hx of clots, migraine with aura, breast cancer. Take same time daily.
Progestins (medroxyprogesterone, norethindrone, levonorgestrel IUD)	Oppose estrogen → endometrial atrophy. Can be oral, IM (Depo), or intrauterine.	Irregular bleeding, weight gain, mood changes, acne, ↓ bone density (Depo > 2 yrs)	Depo: monitor BMD; take Ca^{2+} + Vit D. IUD effective 5–8 years. Counsel on delayed return of fertility after Depo.
GnRH Agonists (leuprolide / Lupron, nafarelin)	Continuous stimulation → pituitary downregulation → **"medical menopause"** with profound estrogen suppression.	Hot flashes, vaginal dryness, mood swings, **bone mineral density loss**, headache	**Max 6 months** without add-back therapy (low-dose estrogen/progestin) to protect bone. Teach calcium, vit D, weight-bearing exercise.
GnRH Antagonists (elagolix, relugolix)	Direct pituitary blockade → rapid, dose-dependent estrogen suppression. Oral, reversible.	Hot flashes, headache, nausea, mood changes, bone loss (less than agonists)	Newer agents — preferred by many for flexible dosing. Same bone density precautions; monitor LFTs.
Danazol synthetic androgen	Suppresses LH/FSH → anovulation + endometrial atrophy. **Rarely used today** due to side effects.	**Androgenic:** weight gain, acne, hirsutism, voice deepening (may be irreversible), ↓ HDL	Use non-hormonal contraception (teratogenic). Counsel on virilization risk; report voice changes immediately.
Aromatase Inhibitors (letrozole, anastrozole)	Block peripheral conversion of androgens → estrogens. Used **off-label** for refractory disease, often combined with progestin or GnRH agonist.	Joint pain, hot flashes, bone density loss, fatigue	Usually reserved for postmenopausal or refractory cases. Combine with bone-protective regimen.

Surgical Management

- **Laparoscopic excision or ablation** of implants — preserves fertility; gold standard surgical approach
- **Cystectomy** for endometriomas > 4 cm or causing pain/infertility
- **Hysterectomy with bilateral salpingo-oophorectomy (BSO)** — definitive treatment, but reserved for patients who have completed childbearing and failed conservative therapy

✕ **Key teaching:** hysterectomy *alone* (ovaries left in place) does NOT cure endometriosis — residual estrogen will continue to stimulate any remaining implants

6 NCLEX Test Traps

COMMON CONFUSIONS ⚠

⚠ TRAP #1 · SOUND-ALIKE DIAGNOSES

~~✕ TRAP: Endometriosis and endometritis are the same condition with two spellings.~~

✓ CORRECT: **Endometriosis** = ectopic endometrial tissue outside the uterus (chronic, hormonal). **Endometritis** = infection/inflammation of the uterine lining (acute, often postpartum, treated with antibiotics). **Endometrial cancer** = malignancy of the uterine lining (postmenopausal bleeding red flag). Three different problems.

⚠ TRAP #2 · "PREGNANCY WILL CURE IT"

~~✕ TRAP: Teach the patient that pregnancy will cure endometriosis.~~

✓ CORRECT: Pregnancy may *temporarily relieve* symptoms because of high progesterone and absence of menstruation, but symptoms typically **return after delivery** once ovulation resumes. Endometriosis is chronic and not curable by pregnancy. Never tell a patient to "just get pregnant."

⚠ TRAP #3 · HYSTERECTOMY = CURE?

~~✕ TRAP: A simple hysterectomy will permanently cure endometriosis.~~

✓ CORRECT: Removing the uterus alone leaves the **ovaries — the estrogen source** — intact, so any residual implants can continue to grow and cause pain. Definitive surgical treatment requires **hysterectomy + bilateral salpingo-oophorectomy**, and even then small recurrences are possible.

⚠ TRAP #4 · SEVERITY ≠ SYMPTOMS

~~✕ TRAP: The patient with severe pain must have advanced (stage IV) disease.~~

✓ CORRECT: Stage of endometriosis (I–IV per ASRM) is based on **anatomic findings, not symptoms**. A patient with stage I (minimal) disease may have debilitating pain, while a patient with stage IV may be asymptomatic. Never dismiss patient-reported pain because of imaging or exam findings.

⚠ TRAP #5 · CA-125 MISUSE

~~✕ TRAP: A normal CA-125 rules out endometriosis.~~

✓ CORRECT: CA-125 can be mildly elevated in endometriosis but is **nonspecific** — it rises in many conditions (PID, fibroids, pregnancy, ovarian cancer). It is *not* a diagnostic test for endometriosis. The diagnostic gold standard remains **laparoscopy with biopsy**.

⚠ TRAP #6 · GNRH AGONIST DURATION

~~✕ TRAP: Leuprolide (Lupron) can be safely continued indefinitely for chronic pain.~~

✓ CORRECT: GnRH agonists induce a hypoestrogenic state causing **significant bone mineral density loss**. Standard limit is **6 months** without "add-back" therapy (low-dose estrogen/progestin) to protect bone. Teach calcium, vitamin D, weight-bearing exercise.

7 Patient Education

TEACH-BACK PRIORITIES

About the Disease

- Endometriosis is **chronic and manageable, not curable**
- Symptoms typically improve after menopause when estrogen declines
- Severity of disease does not equal severity of symptoms
- Keep a **symptom journal** — track pain, flow, GI/GU symptoms with cycle dates

Lifestyle & Comfort

- **Heat therapy** — heating pad, warm baths during flares
- Regular **moderate exercise** releases endorphins and may lower estrogen
- Anti-inflammatory diet: omega-3s, fruits, vegetables, whole grains; limit red meat and trans fats
- Stress reduction: yoga, meditation, mindfulness, adequate sleep

Medications

- Take **NSAIDs with food**; begin 1–2 days before expected period
- Hormonal therapy: take at the **same time daily**; do not skip doses
- On GnRH agonist: take **calcium + vitamin D**, report bone pain or fractures
- Report new dyspnea, leg pain, or severe headache (clot warning on hormonal therapy)

Fertility & Family Planning

- Discuss **fertility goals early** — many treatments suppress ovulation
- Endometriosis is a **leading cause of infertility** but pregnancy is still possible
- Referral to **reproductive endocrinology** if conception is desired
- Options: timed intercourse, ovulation induction, IUI, IVF — discuss with specialist

Emotional & Social Support

- Chronic pain and fertility concerns ↑ risk of **depression and anxiety**
- Connect with **endometriosis support groups** (Endometriosis Foundation of America)
- Consider individual or couples counseling
- Open communication with partner about pain, intimacy, and fertility

When to Call Provider

- Sudden, severe pelvic or abdominal pain
- Heavy bleeding soaking > 1 pad per hour for several hours
- Fever > 100.4°F (38°C), worsening pain, or signs of infection post-op
- Calf pain or swelling, chest pain, shortness of breath (clot)
- Worsening depression, hopelessness, or thoughts of self-harm

8 Memory Boosters & Mnemonics

LOCK IT IN

★ MNEMONIC NO. 1

The 3 D's (+ I)

D **Dysmenorrhea** — painful, cyclical menses

D **Dyspareunia** — painful intercourse

D **Dyschezia** — painful defecation w/ menses

I **Infertility** — adhesions distort anatomy

★ MNEMONIC NO. 2

"ENDO" Anchor

E **Estrogen-dependent** — fed by hormones

N **Nodules** on uterosacral ligaments

D **Dysmenorrhea** & deep dyspareunia

O **Outside** the uterus = the whole disease

★ VISUAL IMAGE

"Chocolate Cysts"

When endometriomas form on the ovary, the trapped menstrual blood ages into a dark brown, thick fluid resembling melted chocolate. The mental image of **"chocolate-filled cysts on the ovary"** = endometrioma. Look for this on transvaginal ultrasound description.

★ PATTERN RECOGNITION

"Cyclical = Endo"

Any pelvic, GI, or GU symptom that **cycles with menses** (worsens during periods, improves between) → **think endometriosis**. Painful periods + painful sex + infertility = nearly pathognomonic combination on NCLEX.

★ ONE-LINER TO REMEMBER ★

"Endometrial tissue in the wrong place, doing the right thing at the wrong time — and there's nowhere for the blood to go."

9 NCJMM Clinical Judgment Scenario

6-STEP MODEL · NGN 2026

★ CASE STEM

Outpatient Gynecology Clinic — 32-year-old female

A 32-year-old GOPO woman presents with a 6-year history of **progressive pelvic pain**. She rates her menstrual pain 9/10, requiring 2–3 missed workdays per cycle. She reports **painful intercourse with deep penetration**, **painful bowel movements during menses**, and has been unable to conceive after 18 months of unprotected intercourse with her husband. Vital signs: T 99.1°F, HR 88, RR 16, BP 118/72, SpO_2 99% on RA. Bimanual exam reveals **tender nodularity along the uterosacral ligaments** and a fixed retroverted uterus. Pelvic ultrasound shows a 3-cm hypoechoic cystic mass on the right ovary. CA-125: 42 U/mL (slightly elevated).

1 Recognize Cues — STEP 1

Relevant: Progressive dysmenorrhea (9/10), deep dyspareunia, dyschezia cycling with menses, 18 months of infertility, tender uterosacral nodules, fixed retroverted uterus, ovarian cyst on US, mildly elevated CA-125, age 32, nulliparous. **Irrelevant:** Stable VS — these do not contribute to the chronic-pain workup but rule out acute hemodynamic compromise.

2 Analyze Cues — STEP 2

The constellation of **cyclical pelvic pain + deep dyspareunia + dyschezia + infertility + uterosacral nodules + ovarian cyst** is highly characteristic of endometriosis. The fixed retroverted uterus suggests adhesions. The ovarian cyst is most likely an **endometrioma ("chocolate cyst")**. Slightly elevated CA-125 supports but does not confirm the diagnosis. Differentials to rule out: PID, IBS, ovarian cancer, fibroids.

3 Prioritize Hypotheses — STEP 3

Top hypothesis: Endometriosis with ovarian endometrioma (highest probability given symptom pattern + exam + imaging). Second: ruptured/hemorrhagic ovarian cyst (less likely given stable VS and chronic course). Third: pelvic adhesive disease from prior unknown infection. Diagnostic priority = **laparoscopy with biopsy** for definitive diagnosis.

4 Generate Solutions — STEP 4

Multi-pronged plan: **(1)** Pain management — scheduled NSAIDs starting 24–48 h before menses, heat therapy. **(2)** Hormonal suppression — discuss combined OCPs or progestin-only options. **(3)** Diagnostic / therapeutic laparoscopy with excision of implants + cystectomy of endometrioma. **(4)** Reproductive endocrinology referral for fertility evaluation given 18-month history. **(5)** Psychosocial support — screen for depression, support group referral. **(6)** Patient education on chronic nature of disease.

5 Take Action — STEP 5

The nurse: **(1)** Administers ordered NSAIDs with food and documents pain score. **(2)** Reinforces teaching on continuous-use OCPs and side effects. **(3)** Schedules pre-op workup for laparoscopy; ensures informed consent for diagnosis + treatment + possible cystectomy. **(4)** Coordinates referral to reproductive endocrinology. **(5)** Screens with PHQ-9 for depression; provides written resources for endometriosis support organizations. **(6)** Validates patient's experience — chronic pain has often been dismissed for years.

6

Evaluate Outcomes

STEP 6

Expected outcomes: Pain score decreases by ≥ 2 points within one cycle on NSAIDs + hormonal therapy. Patient verbalizes understanding of chronic disease and treatment options. Adheres to medication regimen with no thromboembolic events. Reports improved quality of life and ability to work. Successfully undergoes laparoscopy with no complications; pathology confirms endometriosis. Reproductive endo consult completed; fertility plan established. PHQ-9 stable or improved. **Reassessment** at 3 months for treatment response.