



HOW ENDOMETRIOSIS WORKS¹

A hormone called estrogen plays an important role in your menstrual cycle.

1

The hypothalamus and pituitary gland in the brain produce the hormones GnRH, LH and FSH*

PITUITARY
GLAND

HYPOTHALAMUS

2

These hormones lead to the production of estrogen from the ovaries

Ovary

UTERUS

3

Estrogen signals the tissue that lines the uterus, the endometrium, to thicken

ENDOMETRIUM

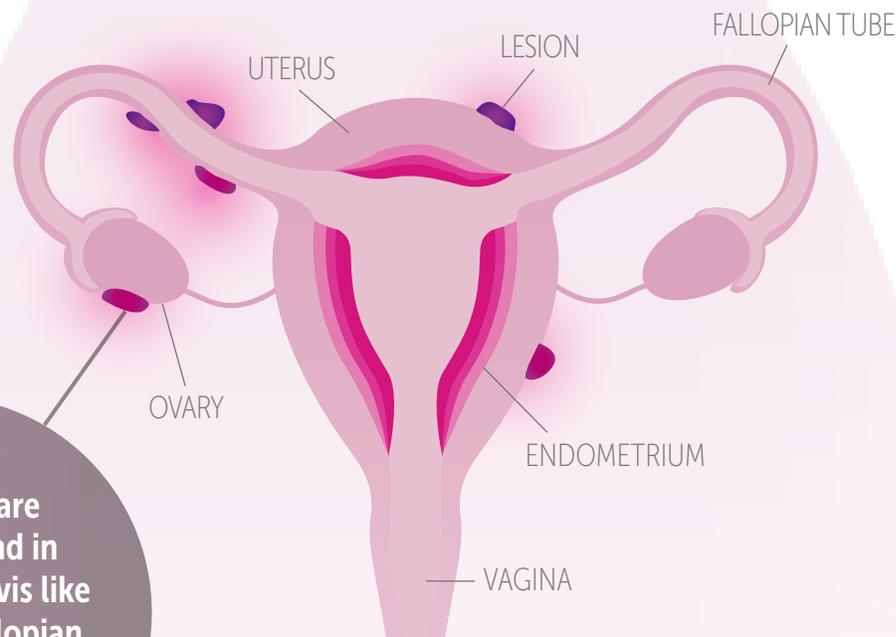
VAGINA

*Gonadotropin-releasing hormone, luteinizing hormone, follicle-stimulating hormone



HOW ENDOMETRIOSIS WORKS

Endometriosis occurs when endometrial tissue grows in places outside of the uterus, forming lesions.^{2,3}



The lesions are typically found in areas of the pelvis like the ovaries, fallopian tubes, uterus, rectum and bladder.²

When **estrogen** tells the endometrium to thicken, it also signals the lesions to grow, which can cause **inflammation and pain**. Depending on the location of the lesions, different types of pain and symptoms may develop.¹⁻⁴

Your body is producing estrogen all the time; that's why there may be pain regardless of your period.³

There are several ways to control estrogen levels:⁵

- a. Reduce the amount of estrogen the ovaries produce
- b. Reduce the signal the pituitary gland sends to the ovaries
- c. Surgical procedure to remove the ovaries

References:

1. Brzyski RG, Knudtson J. Female Reproductive Endocrinology. Merck Manual website. <http://www.merckmanuals.com/professional/gynecology-and-obstetrics/female-reproductive-endocrinology/female-reproductive-endocrinology>. Updated April 2013. Accessed July 27, 2016. 2. Association of Professors of Gynecology and Obstetrics. Diagnosis & Management of Endometriosis: Pathophysiology to Practice. Educational Series on Women's Health Issues. 3. Bulun SE. Endometriosis. *N Engl J Med*. 2009;360(3):268-279. 4. Practice Committee of the American Society for Reproductive Medicine. Treatment of pelvic pain associated with endometriosis: a committee opinion. *Fertil Steril*. 2014;101(4):927-935. 5. Endometriosis. In: Becker K. *Principles and Practice of Endocrinology & Metabolism*. 3rd ed. Philadelphia, PA: Lippincott Williams & Wilkins; 2001. <http://ovidsp.tx.ovid.com.proxy.cc.uic.edu/sp-3.20.0b/ovidweb.cgi>. Accessed August 3, 2016.