

Endometriosis Characteristics

Endometriosis is a condition in which cells from the lining of the uterus (endometrium) appear and flourish outside the uterine cavity, most commonly on the membrane which lines the abdominal cavity, the peritoneum.



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Endometrial Tissue Outside of Uterus

Endometrial Tissue-box Outside of Uterus

This disorder is characterised by ectopic and hormonally active endometrial tissue on other organs outside of the uterus.

Glands and Stroma

Gland with Straw-man

The non-neoplastic endometrial tissue which implants into various parts of the body is composed of glands and stroma.

Most Common in Ovary, Pelvis, Peritoneum and Bowels

#1 Foam-finger at Ovary, Pelvis, Parrot-toe, and Bowels-bowl

Though in endometriosis the tissue can be found anywhere, it most often manifests in the ovaries, bowels, pelvis and peritoneum.

"Chocolate Cyst" in Ovary

Chocolate Sisters in Ovary

In the ovaries, this presents as an endometrioma, and is described as a blood-filled "chocolate cyst."

Adenomyosis

Add-gnome-mayo

Endometriosis can co-exist with adenomyosis, which is ectopic endometrial tissue in the myometrium (the thick, muscular layer of the uterus).

Theories

Retrograde Flow

Retro-guy Flow

One theory describing the etiology is the retrograde flow theory. It states that during a woman's menstrual flow, some of the endometrial debris exits the uterus through the fallopian tubes and attaches itself to the peritoneal surface where it can proceed to invade the tissue as endometriosis.

Metaplastic Transformation

Metal-plastic-materials Transforming

In another theory, it is hypothesized that the glandular and stromal tissue exist ectopically due to metaplastic transformation of multipotent cells.



Mullerianosis

Mule-nose

In the müllerianosis theory, it is thought that cells with the potential to become endometrial are laid down in tracts during embryonic development and organogenesis. These tracts follow the female reproductive (Mullerian) tract as it migrates caudally (downward) at 8–10 weeks of embryonic life. Primitive endometrial cells become dislocated from the migrating uterus and act like seeds or stem cells.