

# Endometriosis: an improper name for two different disorders

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The suffix *osis* (from ancient Greek, *ωσις*) in medical terms denotes a state of morphological and functional disorder, in general with degenerative consequences such as osteoporosis, arthrosis, diverticulosis, cirrhosis, myocardosis, apoptosis, and necrosis<sup>1</sup>. Even when this word is used to define an increasing process, for example, leukocytosis, fibromatosis, tuberculosis, and mycosis, deteriorating consequences occur in cells, tissues, and organs as well<sup>1</sup>. Endometriosis may be used as endometrial hypoplasia or atrophy, which occurs with the age inside uterus, starting in the climacteric period. However, this term has been used as the presence of endometrial tissue not only in abnormal sites, mostly in the pelvis, but also in other parts of the body. Endometrial tissue has been described in peritoneum, omentum, liver, kidney, lung, heart, spine, eyes, neck, and even central nervous system. This tissue is frequently found in pelvic tissues, including ovary, sigmoid, rectum, and abdominal wall after surgical procedures on the uterus<sup>2</sup>.

The presence of endometrial tissue outside the uterus is not a deteriorating process or an increased disorder of the endometrium. The correct term for the presence of any tissue far from its origin is “teleplasia” (*τήλε*, at a distance, far away, or far from; and *πλασία*, molding, formation), but this word was not included in the medical terminology. Since the first studies of pathology in the 19th century, metaplasia (*μετά*, after, beyond, changed, or altered) has been adopted. The pathogenesis of any metaplasia, including metastasis, is not known, but it is not due

to a modification of local mature tissue to another type of cell. Only the stem cells are able to create other cells and probably the metaplasia of any tissue<sup>3</sup>. None of theories that explained this disorder has been proven. Thus, the correct term for endometrial tissue far from the uterus is endometrial metaplasia no matter its origin since the embryonic stage or from stem cells<sup>4,5</sup>.

On the other hand, the iatrogenic implant of endometrial tissue in pelvic organs (peritoneum, ovary, urinary bladder, sigmoid, rectum) and in the surgical wound during a procedure on the uterus, mainly cesarean, biopsies, and intrauterine fetal surgeries, cannot be named endometrial metaplasia. The pathogenesis of this disorder has been established as a surgical event, and it should be named endometrial implant. These implants are self-limited, occur near the uterus, and do not spread to distal sites<sup>6,7</sup>.

In conclusion, spontaneous presence of endometrial tissue outside the uterus should be named endometrial metaplasia, and when the ectopic endometrial tissue is due to a surgical procedure, it is an endometrial implant, but not endometriosis.

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