

Part 5: Diagnosis of Endometriosis

Because the symptoms of endometriosis are not very specific, the diagnosis of endometriosis cannot be made by the symptoms alone. However, symptoms can give a doctor a first hint towards the diagnosis of endometriosis.

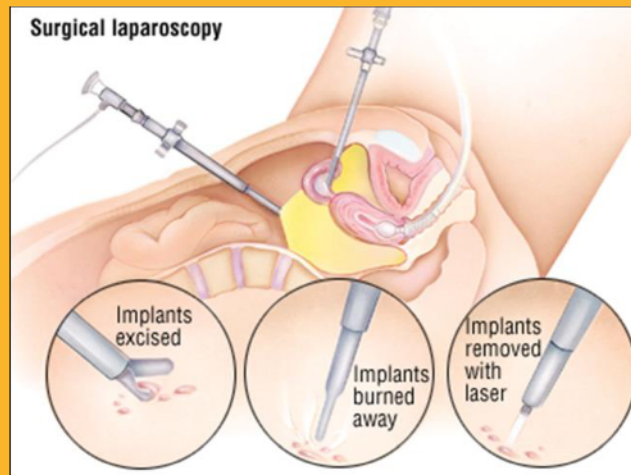
Should my doctor perform a clinical examination?

In addition to your symptoms, clinical examination can provide additional information to the doctor. However, there is little scientific evidence for the value of certain clinical signs to come to the diagnosis endometriosis.

During clinical vaginal examination the doctor looks for tenderness, nodules or swelling of the vaginal wall especially in the deepest point of the vagina between the back of the uterus and the rectum by inspection using the speculum and by palpation using his/her fingers. In women with deep endometriosis or endometriosis of the ovaries, clinical examination may give considerable information regarding the proper diagnosis, while in peritoneal disease the clinical examination most of the time is completely normal.

What is laparoscopy?

Laparoscopy is a surgical technique. The surgeon makes 2 small incisions in the abdomen, near the navel, through which a the laparoscope with a camera is brought into the abdomen. Through a camera, the surgeon can see the organs in the pelvis and he or she can determine whether or not endometriosis is present. If he or she spots lesions of endometriosis, the surgeon can remove small pieces of tissue to be examined in the laboratory (called histology).



Laparoscopy
Krames Information brochure on endometriosis

Historically, laparoscopy with histological confirmation is seen as the gold standard for the diagnosis of endometriosis. However, there are no studies showing that a positive laparoscopy (when a doctor can see lesions during laparoscopy) truly proves the presence of endometriosis. The guideline development group encourages doctors to obtain small pieces of tissue for histologic examination whenever laparoscopy is performed. If an experienced doctor performs a laparoscopy and he or she cannot identify endometriosis, it is likely that the woman does not have endometriosis.

Should I undergo laparoscopy for a definite diagnosis?

A **definite diagnosis** of endometriosis is considered when the doctor has seen endometriosis during **laparoscopy** and this is confirmed by taking biopsies for histology.

For a **definite diagnosis, laparoscopy** is needed. However, if your doctor suspects endometriosis based on your symptoms, clinical examinations and transvaginal ultrasound, he or she may also propose to try medical treatment without establishing a definitive diagnosis first to reduce your symptoms. Options for medical treatment are analgesics, hormonal contraceptives or progestagens. If these treatments help relieving your symptoms, you may decide not to undergo laparoscopy. If these treatments are not helping you, you can still decide to undergo a laparoscopy.

In addition, in case you doctor suspects deep endometriosis, he or she may propose medical treatment and refer you to an expert centre for further diagnosis and/or surgery.

Recommendations in the guideline:

The GDG recommends that clinicians perform a laparoscopy to diagnose endometriosis, although evidence is lacking that a positive laparoscopy *without histology* proves the presence of disease. *(Good Practice Point)*

The GDG recommends that clinicians confirm a positive laparoscopy by histology, since positive histology confirms the diagnosis of endometriosis, even though negative histology does not exclude it. *(Good Practice Point)*

The GDG recommends that clinicians obtain tissue for histology in women undergoing surgery for ovarian endometrioma and/or deep infiltrating disease, to exclude rare instances of malignancy. *(Good Practice Point)*

Can Ultrasound, MRI, CT-scan, or CA-125 be used for diagnosing endometriosis?

Clinicians and researchers have been searching for other techniques to diagnose endometriosis in a non-invasive way, meaning, with minimal pain or discomfort to the patient.

Options that have been explored are **ultrasound**, MRI, CT scan, 3D ultrasound and biomarkers, like CA-125. Some of these methods are currently used when the doctor suspects endometriosis, since they can help the doctor in making a diagnosis or in helping to assess the extent of the disease.

Transvaginal **ultrasound** can be performed to diagnose ovarian endometriosis or deep endometriosis. The latter diagnosis is not so easy to make by ultrasound, you have to have a lot of experience to be able to do this. 3D ultrasound and MRI are not well suited to diagnose endometriosis. In established deep endometriosis, however, MRI can be used to assess the extent of the disease.

Some diseases can be diagnosed by a simple blood test through the detection of biomarkers. Biomarkers are molecules in a blood or urine sample of a patient that can be found during analysis in a laboratory. Researchers have looked for biomarkers (for instance CA125) for endometriosis in endometrial tissue, menstrual or uterine fluids, plasma, urine or serum. So far, no biomarkers are proven to be able to diagnose endometriosis. Therefore, the guideline development group recommends not using biomarkers to try to diagnose endometriosis.

Recommendations in the guideline:

In women with symptoms and signs of rectal endometriosis, transvaginal sonography is useful for identifying or ruling out rectal endometriosis. (based on level A evidence)

Clinicians are recommended to perform transvaginal sonography to diagnose or to exclude an ovarian endometrioma. (based on level A evidence)

Clinicians should be aware that the usefulness of 3D sonography to diagnose rectovaginal endometriosis is not well established (based on level D evidence)

Clinicians should be aware that the usefulness of magnetic resonance imaging (MRI) to diagnose peritoneal endometriosis is not well established. (based on level D evidence)

Clinicians are recommended not to use biomarkers in endometrial tissue, menstrual or uterine fluids, or immunological biomarkers, including CA-125, in plasma, urine or serum to diagnose endometriosis. (based on level A evidence)

In women with deep endometriosis, there can be **lesions** in other organs and/or severe **adhesions**. In case that your doctor suspects deep endometriosis, he can perform a Barium enema test, **ultrasound** and/or MRI to get information on the severity of the disease, before performing **laparoscopy** for a **definite diagnosis**, or starting medical treatment.

Recommendations in the guideline:

The GDG recommends that clinicians should assess ureter, bladder, and bowel involvement by additional imaging if there is a suspicion based on history or physical examination of deep endometriosis, in preparation for further management. (Good Practice Point)