

# Diagnostic imaging methods in gynecology

Diagnostic imaging methods in gynecology are partly in the hands of a gynecologist (transvaginal ultrasound), and a part is usually provided by a radiologist. For patients of childbearing age, it is necessary to ask about the possibility of pregnancy before an X-ray or CT examination .

## Native Abdominal Image

As a rule, it is not indicated when a gynecological disease is suspected, as calcifications in uterine fibroids and intrauterine bodies are often visible as an incidental finding .

	X-ray of the left hip: calcification in the uterine myoma as a secondary finding during the CEP check
	The native belly shot we shouldn't see: pregnancy

## Ultrasound

The basic examination method in gynecology is Ultrazvuk .

### Transvaginal ultrasound

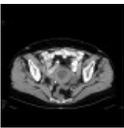
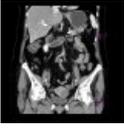
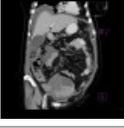
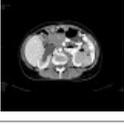
The examination is usually performed by a gynecologist. A special ultrasonographic (so-called endocavitary) probe is used, which is introduced into the vagina or the rectum . The advantage is a more detailed view of the organs of the pelvis, because the organs are closer to the probe than during a transabdominal examination. In addition, the organs are not covered by intestinal loops . The probe uses a higher frequency (better spatial resolution) and there is no need to have a full bladder . Another advantage is the possibility of performing interventions under ultrasound control - e.g. fluid aspiration.

### Transabdominal ultrasound

Transabdominal ultrasound of gynecological organs requires a full bladder , which creates a so-called acoustic window. Otherwise, the examination is prevented by the presence of gas in the intestinal loops . The examination is performed either by a gynecologist or a radiologist. The uterus , vagina, and often both ovaries can be seen . Ultrasound is also used as a control examination in monitoring oncology patients, and in acute patients to rule out other pathology that would explain the patient's problems ( appendicitis , diverticulitis , intestinal inflammation).

## Computed tomography (CT)

In gynecology, computed tomography is used in the staging of malignancies , to evaluate nodal involvement and metastatic spread , which is most often in the peritoneal cavity and liver . An MRI is usually more appropriate to evaluate a local finding . Uterine fibroids , ovarian cysts and dilated pelvic veins are frequent secondary findings in CT examinations of the abdomen and pelvis for non-gynecological indications, as a sign of pelvic congestion syndrome in symptomatic patients.

	CT scan of the abdomen and pelvis: Tumor of the cervix with spread to the parametries, hydronephrosis
	CT abdomen and pelvis: uterine myoma
	CT of the abdomen and pelvis: ovarian carcinoma, peritoneal carcinomatosis
	CT of the abdomen and pelvis: metastatic involvement of the ovaries in a stomach tumor (so-called Krukenberg's tumor)
	CT abdomen and pelvis: dermoid ovary

## Magnetic resonance imaging (MRI)

MRI is currently used to stage tumors, mainly of the cervix and body of the uterus, to evaluate the depth of invasion and their propagation into the surrounding structures. Another appropriate indication is the deposit and expansive processes coming from the ovaries to differentiate their etiology and dignity. MRI is an excellent method for endometriosis. Another use of MRI is in the detection of fistulas and their communication with surrounding organs.

## Angiography (AG)

Recently, mini-invasive treatment of uterine fibroids by selective embolization of uterine artery branches with microparticles has been developed. After successful embolization, fibroids degenerate, shrinking by about half in 3 months and by about 3/4 in a year, associated problems disappear.

## Links

### External links

- [Images at atlas.mudr.org](http://atlas.mudr.org)
- [Ultrasound in gynecology](#)