TEST

Pelvic ultrasound - abdominal

An abdominal pelvic ultrasound uses sound waves over the lower abdomen to create images of pelvic organs.

WHAT IT MEASURES
Images of pelvic organs, including bladder and reproductive organs

SAMPLE
None

FASTING NEEDED?
No, unless combined with another scan requiring fasting

HOW LONG IT TAKES
15 to 30 minutes

RESULTS IN
Same day to several days; varies by imaging service or laboratory

USED FOR
Diagnosis and monitoring

MAIN LIMITATION
Underfilled bladder or bowel gas can hide pelvic organs

Overview

An abdominal pelvic ultrasound, also called a transabdominal pelvic ultrasound, creates pictures of structures inside your pelvis. A healthcare professional moves a small handheld device called a transducer over the skin of your lower abdomen.

The transducer sends out high-frequency sound waves. These bounce off organs and tissues to create moving images on a screen. The test does not use X-rays or other ionising radiation.

Depending on your anatomy and the reason for the scan, it may show the bladder, uterus, cervix, ovaries, prostate, and nearby tissues. It can measure structures and look for changes such as fluid, cysts, growths, or swelling.

This is an external scan. A transvaginal or transrectal ultrasound places a specially designed probe inside the body and may provide more detailed images in some situations.

Why the test is ordered

The test may be ordered to investigate symptoms or follow a condition already found. Common reasons include:

An abdominal pelvic ultrasound is not a general screening test for every pelvic cancer. Whether it is suitable depends on your symptoms, medical history, examination, and the organ being assessed.

- Pelvic or lower abdominal pain
- Unusual vaginal bleeding or changes in periods
- A suspected ovarian cyst, fibroid, or other pelvic growth
- Difficulty emptying the bladder or other urinary symptoms
- Checking the position of some intrauterine contraceptive devices
- Monitoring a known cyst, fibroid, or other pelvic finding
- Assessing pelvic organs during fertility or pregnancy care
- Examining the bladder or prostate

Who should have the test

You may be offered this test if your symptoms, examination, or another test suggests that pictures of the pelvic organs would be useful. It may also be used for planned follow-up of a known finding.

Ultrasound can be used during pregnancy because it does not expose you to ionising radiation. However, pregnancy scans have specific purposes and timing, so the type of ultrasound offered may differ.

A clear medical reason is still important. Ultrasound should not be used only to obtain keepsake pregnancy images without appropriate clinical oversight.

How to prepare

You will usually need a comfortably full bladder. Fluid in the bladder helps move bowel out of the way and creates a clearer path for the sound waves.

Your appointment instructions should tell you how much water to drink and when to stop urinating. Follow those instructions rather than a general amount, because preparation differs between imaging services.

You can usually eat normally. Fasting may be required if the pelvic ultrasound is being combined with an abdominal scan of organs such as the gallbladder.

Take your usual medicines unless your healthcare team has given you different instructions. Tell the imaging service if you take water tablets like furosemide or hydrochlorothiazide , have fluid restrictions, use a urinary catheter, or cannot comfortably hold urine.

Wear clothing that allows easy access to your lower abdomen. You may be asked to change into a gown.

What happens during the test

You will usually lie on your back on an examination bed. The sonographer, a healthcare professional trained to perform ultrasound scans, will place gel on your lower abdomen. The gel helps sound waves pass between the transducer and your skin.

The sonographer moves the transducer across the area while viewing images on a monitor. You may be asked to change position, hold your breath briefly, or point to where you feel pain.

Some pressure may be needed to obtain clear images. This can feel uncomfortable if your bladder is very full or the area is tender, but it should not usually be painful. Tell the sonographer if you need them to stop or reduce the pressure.

After enough images have been collected, you can wipe off the gel and empty your bladder.

Understanding your results

A radiologist or another qualified healthcare professional interprets the images and prepares a report. The report describes which structures were seen, their appearance and measurements, and whether further assessment is suggested.

A result may be described as normal, abnormal, uncertain, or limited. A limited scan means that one or more structures could not be seen well enough. It does not necessarily mean that something is wrong.

Some findings, such as simple ovarian cysts, may be related to normal menstrual changes. Others may need follow-up imaging or a different test. Ultrasound appearance alone cannot always show exactly what a growth is made of or whether it is harmless.

There is no single universal set of normal pelvic measurements. Ranges and interpretation vary by imaging service or laboratory, age, sex, pregnancy status, menstrual or menopause status, medicines, previous surgery, and clinical context.

Your result should be considered alongside your symptoms, medical history, examination, and any other tests.

What affects the results

A full bladder is one of the most important factors. If it is not full enough, the uterus, ovaries, prostate, or other structures may be difficult to see. An overly full bladder can also cause discomfort and may affect the position of pelvic organs.

Other factors that can change image quality or interpretation include:

The menstrual cycle, pregnancy, menopause, and hormone medicines can change how the uterus lining and ovaries normally appear. These are real biological changes, not laboratory or equipment errors. Providing the date of your last period and information about pregnancy or hormone treatment can help interpretation.

Recent exercise does not usually alter the scan itself. Most medicines do not directly affect the images, although water tablets can make it harder to keep a full bladder.

- Bowel gas blocking the sound waves
- The depth of the organs beneath the skin
- Abdominal scars, dressings, or open wounds
- Movement during image collection
- The position or natural shape of an organ
- Difficulty lying flat or changing position

Accuracy and limitations

An abdominal pelvic ultrasound can show many pelvic structures clearly, but it does not find every abnormality. There is no single reliable miss rate because accuracy differs by organ, condition, equipment, operator experience, bladder filling, and body characteristics.

Small growths or changes deep in the pelvis may be missed. Bowel gas can hide an ovary or another structure. The test may also identify a harmless variation or temporary cyst as abnormal, leading to repeat imaging even though no treatment is needed.

Ultrasound can show that a mass is present, but it cannot always establish what it is. A transvaginal ultrasound often gives clearer images of the uterus lining and ovaries because its probe is closer to them. MRI may be better for detailed tissue assessment, while CT may be

preferred when bowel, urinary stones, injury, or a wider area of the abdomen needs evaluation.

A biopsy may be needed when the answer depends on examining tissue under a microscope.

Risks and complications

An abdominal pelvic ultrasound does not use ionising radiation and has no known harmful effects when used appropriately. The main issue is temporary discomfort from a full bladder or pressure from the transducer.

The gel may feel cold or wet but is normally removed easily after the scan.

What happens next

You can usually return to normal activities immediately. There is no recovery period, and you may eat, drink, exercise, and take medicines as usual unless another procedure requires restrictions.

The sonographer may not be able to discuss the result during the appointment. A report is usually sent to the healthcare professional who requested the scan. Routine results may be reviewed at a planned appointment, by telephone, or through a patient portal.

You may be offered repeat ultrasound, a transvaginal or transrectal scan, MRI, CT, blood tests, or a specialist appointment if the images were limited or a finding needs closer assessment.

Do not wait for a routine result if you develop severe or rapidly worsening pelvic pain, fainting, difficulty breathing, or heavy bleeding with marked weakness. Seek urgent medical help for pelvic pain or bleeding during a known or possible pregnancy, especially if you feel faint or very unwell.

Common questions

Can I drink coffee before a pelvic ultrasound?

Usually, but water is often better for filling the bladder. Coffee and other caffeinated drinks may increase the urge to urinate. Follow your appointment instructions if the pelvic scan is combined with another test requiring fasting.

Does the time of day matter?

Usually not. Choose a time when you can follow the drinking instructions and keep a full bladder. The timing may matter for fertility care or when imaging is planned for a particular

stage of your menstrual cycle.

Can I exercise beforehand?

Normal exercise does not usually affect the images. Avoid becoming dehydrated, and leave enough time to drink the requested water before your appointment.

Can I have the scan during my period?

Usually, yes. Bleeding does not prevent an abdominal scan, although the menstrual cycle can affect how the uterus lining and ovaries appear. Tell the sonographer when your last period started.

What if I cannot hold a full bladder?

Contact the imaging service or tell the sonographer when you arrive. They may adjust the preparation, let you partially empty your bladder, or consider another type of scan.

Is abdominal pelvic ultrasound safe in pregnancy?

Diagnostic ultrasound does not use ionising radiation and is commonly used during pregnancy. It should still be performed for an appropriate medical reason by trained healthcare professionals.

Sources

- American College of Obstetricians and Gynecologists. Ultrasound Exams
- American Institute of Ultrasound in Medicine. Practice Parameter for the Performance of an Ultrasound Examination of the Female Pelvis
- NHS. Ultrasound scan
- Radiological Society of North America and American College of Radiology. Pelvic Ultrasound
- US Food and Drug Administration. Ultrasound Imaging