PROCEDURE

Abdominal tap

An abdominal tap uses a needle or thin tube to remove fluid from the abdomen for testing or symptom relief.

PURPOSE
Diagnose the cause of ascites or relieve pressure

PROCEDURE TYPE
Diagnostic and therapeutic; minimally invasive needle drainage

WHERE IT IS DONE
Outpatient clinic, radiology suite, or bedside

ANAESTHESIA
Local anaesthetic; sedation is usually unnecessary

HOW LONG IT TAKES
Usually 20 to 45 minutes

PREPARATION
Medication review, empty bladder, fasting only if instructed

RECOVERY
Usually same day; no driving after sedation

MAIN RISKS
Bleeding, infection, fluid leakage, organ injury

RESULTS
Pressure relief immediately; laboratory results within hours to days

Overview

An abdominal tap is a procedure that removes fluid from the space around the organs in your abdomen. Clinicians call it paracentesis . The collected fluid is often sent to a laboratory for testing.

Fluid that builds up in the abdomen is called ascites . It can make the abdomen swollen, uncomfortable, or tight. It may also affect breathing or eating.

An abdominal tap may remove a small sample to help find out why fluid has collected. It can also drain a larger amount to relieve pressure. Ultrasound is commonly used to locate the fluid and choose a safe place for the needle.

Why the procedure is performed

Your healthcare team may recommend an abdominal tap to:

Laboratory tests can count blood cells, measure protein and albumin, and look for bacteria. Albumin is a protein in blood and body fluids. Other tests may be selected based on your medical history.

Removing fluid can improve pressure-related symptoms, but it does not treat the condition causing the fluid to collect. Ascites may return and sometimes requires repeat treatment.

- Investigate new or unexplained abdominal fluid
- Check for infection in the fluid
- Look for signs of cancer or another medical condition
- Relieve pressure, pain, poor appetite, or breathing difficulty
- Recheck fluid when your condition changes

Who should and should not have it

An abdominal tap may be appropriate when testing the fluid could guide treatment or when the fluid is causing significant discomfort or breathing problems.

The procedure may be delayed or avoided if ultrasound cannot identify a safe pocket of fluid. A skin infection at the planned needle site may require a different location or treatment first.

Extra planning may be needed if you have:

Blood test abnormalities associated with liver disease do not automatically rule out the procedure. Your team will consider the overall bleeding risk rather than relying on one result alone.

Tell the team if you take a blood thinner or medicine that affects platelets. Do not stop prescribed medicine unless the clinician responsible for the procedure tells you to do so.

- A serious bleeding disorder
- A very low platelet count
- A distended bladder
- Previous abdominal surgery or internal scar tissue
- Pregnancy

- Enlarged abdominal organs or blocked areas of fluid
- Severe illness that makes positioning unsafe

How to prepare

Follow the treating facility's instructions, even if they differ from general information here. Their instructions take priority because preparation may reflect your medicines, health conditions, and planned procedure.

Give the team an up-to-date list of medicines, vitamins, and supplements. Mention blood thinners like warfarin or apixaban , aspirin, previous bleeding problems, allergies, pregnancy, and any past reaction to local anaesthetic.

You may have blood tests to check blood cells, clotting, kidney function, or liver function. Not everyone needs the same tests.

Fasting is usually unnecessary when only local anaesthetic is planned. You may need to stop eating or drinking if sedation or another procedure is expected. Follow the facility's specific fasting directions.

You will usually be asked to empty your bladder shortly before the abdominal tap. Wear comfortable clothing and arrange transport if you are told that you will receive sedation.

What happens during the procedure

You may lie on your back with your upper body raised or turn slightly onto one side. The team checks your blood pressure, pulse, and breathing.

Ultrasound is often used to find the fluid and avoid nearby organs and blood vessels. The chosen area is cleaned, and sterile covers are placed around it.

The clinician injects local anaesthetic into the skin and deeper tissues. This can sting briefly. Once the area is numb, a needle or thin plastic tube called a catheter is guided into the fluid.

A small amount may be collected into tubes for laboratory testing. If the goal is symptom relief, fluid drains through tubing into bottles or a collection bag. You may feel pressure or pulling, but sharp pain should be reported immediately.

For a large-volume drainage, your blood pressure may be checked repeatedly. Some people receive albumin through a vein to support circulation after a large amount of fluid is removed.

The catheter is then removed, and a dressing is placed over the site. Stitches are not usually needed.

Recovery and what to expect afterward

Mild tenderness or bruising around the puncture site can occur. The pressure caused by ascites may improve soon after drainage. Tell the team if you develop increasing pain rather than mild soreness.

You can usually eat and drink normally afterward unless another condition or procedure limits this. Follow any advice about salt or fluids that is part of your ascites treatment plan.

Take it easy for the rest of the day. Avoid strenuous exercise and heavy lifting for the period recommended by the treating facility. Keep the dressing clean and dry, and follow instructions about when to remove it.

If you received only local anaesthetic and feel well, driving may be allowed. Do not drive if you received sedation, feel dizzy or weak, or were specifically told not to drive. Arrange for someone else to take you home in those situations.

Many people return to desk-based work the next day. You may need more time if a large amount of fluid was removed, your work is physical, or your underlying illness is affecting you.

Risks and possible complications

Possible risks include:

Ultrasound guidance helps the clinician choose a safer entry point. Monitoring during and after large-volume drainage helps identify blood pressure or circulation changes.

A small amount of clear fluid may leak onto the dressing. Persistent or heavy leakage should be assessed. Serious internal bleeding or organ injury requires urgent medical care.

- Bleeding or bruising at the puncture site
- Ongoing leakage of abdominal fluid
- Infection of the skin or abdominal fluid
- Low blood pressure or dizziness after substantial drainage
- Kidney or circulation problems after large-volume drainage
- Accidental injury to the bowel, bladder, or a blood vessel

Results and follow up

If fluid was removed to relieve pressure, you may notice the effect immediately. Your team

may record your weight, abdominal measurement, blood pressure, and amount drained.

Initial cell counts and chemical tests may be available within hours. Bacterial cultures and tests for abnormal cells can take several days. Timing differs according to the tests ordered and the laboratory.

Your clinician will explain what the results suggest and whether you need treatment, more testing, or routine follow-up. You may also need a plan to manage recurrent fluid, such as medicine, dietary changes, repeat drainage, or treatment of the underlying condition.

Alternatives

The alternatives depend on whether the goal is diagnosis, symptom relief, or both.

Observation may be reasonable when the amount of fluid is small, stable, and not causing significant problems. It avoids a procedure but does not identify what is in the fluid.

Blood tests and imaging can provide useful clues. However, they cannot directly test abdominal fluid for infection, cancer cells, or its chemical makeup.

Salt reduction and diuretic medicines, sometimes called water tablets, may gradually reduce ascites. They work more slowly than drainage and can affect blood pressure, kidney function, or body salts. They also cannot replace fluid sampling when infection or another diagnosis is a concern.

A longer-term drainage catheter may be considered in selected cases of repeatedly returning ascites. It reduces the need for separate taps but brings ongoing infection, leakage, and catheter-care risks.

Some people with recurrent ascites related to advanced liver disease may be assessed for a shunt procedure called TIPS or for liver transplantation. These are not simple substitutes for an abdominal tap. They involve more extensive assessment, different risks, and specific eligibility requirements.

When to call your healthcare team

Contact your healthcare team promptly if you have:

Seek emergency help for fainting, severe breathing difficulty, uncontrolled bleeding, rapidly worsening abdominal pain, confusion, or a hard and increasingly swollen abdomen. These are different from routine soreness and should not wait for a scheduled follow-up.

For mild tenderness, a small bruise, or questions about the dressing, contact the team during

normal hours unless the problem is worsening.

- Fever, chills, or increasing redness around the puncture site
- Worsening abdominal pain or swelling
- Persistent fluid leakage that soaks repeated dressings
- New dizziness, weakness, or reduced urination
- Vomiting or difficulty keeping fluids down

Common questions

Will I be asleep?

Usually not. Local anaesthetic numbs the puncture area, and you remain awake. Sedation is not commonly needed, but it may be used in selected situations.

Can I drive home afterward?

You may be able to drive after local anaesthetic if the facility agrees and you feel well. Do not drive after sedation or if you feel dizzy, weak, or unwell.

How painful is an abdominal tap?

The local anaesthetic can sting briefly. You may then feel pressure, pulling, or mild cramping. Tell the clinician immediately if you feel sharp or increasing pain.

How much fluid will be removed?

A small amount may be enough for testing. For symptom relief, the team may remove a much larger amount while monitoring how you feel and how your blood pressure responds.

When will I know the results?

You may feel pressure relief immediately. Some laboratory results return within hours, while cultures and tests for abnormal cells may take several days.

Can the fluid come back?

Yes. An abdominal tap removes existing fluid but does not cure its underlying cause. Your team may recommend medicines, dietary changes, repeat drainage, or other treatment.

Sources

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