CONDITION

Hyperplasia

Hyperplasia is an increase in the number of cells in a tissue or organ, which may be harmless or may need monitoring or treatment.

WHAT IT IS
Increased cell numbers causing tissue or organ enlargement

BODY SYSTEM
Any body system

MAIN SYMPTOMS
Often none, bleeding, swelling, pressure symptoms

WHAT CAUSES IT
Hormones, irritation, compensation, medicines, or inherited changes

HOW IT IS DIAGNOSED
Tissue biopsy; hormone or genetic tests for certain types

MAIN TREATMENT
Monitoring, cause-specific medicines, procedures, or surgery

CAN IT BE CURED?
Sometimes - reversible causes or affected tissue can be treated

IS IT AN EMERGENCY?
Sometimes - with severe bleeding or acute urinary retention

LONG-TERM OUTLOOK
Usually manageable; atypical forms may progress to cancer

Overview

Hyperplasia means that the number of cells in a tissue or organ has increased. This may make the affected area thicker or larger. It can happen almost anywhere in the body.

Hyperplasia is a condition or tissue change, not one specific disease. Some forms are a normal response. For example, glandular tissue in the breasts increases during pregnancy, and liver cells can multiply after part of the liver is removed.

Other forms develop because cells are repeatedly stimulated by hormones, inflammation, injury, or medicines. Examples include enlargement of the prostate, thickening of the uterine lining, and overgrowth of gum tissue.

Hyperplasia is not the same as cancer. In hyperplasia, cells increase in number but usually

remain organised and resemble normal cells. However, some forms contain abnormal-looking cells, called atypia . Depending on the tissue, atypical hyperplasia may have a greater chance of becoming cancer or may occur alongside cancer. This is why the exact type matters.

Hyperplasia is also different from hypertrophy , which means existing cells become larger rather than more numerous. Both changes can make an organ look enlarged.

Symptoms

Hyperplasia often causes no symptoms. It may be found during imaging, an examination, an operation, or a biopsy performed for another reason.

When symptoms occur, they come from the affected organ rather than from hyperplasia itself. Possible examples include:

The size of an overgrowth does not always show how serious it is. A small area of atypical cells may need closer attention than a larger area of ordinary, non-atypical hyperplasia.

Symptoms such as bleeding, pain, a lump, or problems passing urine have many possible causes. They do not confirm hyperplasia.

- Uterine lining: heavy, prolonged, irregular, or unexpected vaginal bleeding
- Prostate: a weak urine stream, difficulty starting, frequent urination, or incomplete emptying
- Breast tissue: a lump or an abnormal area found on breast imaging
- Gums: swollen or enlarged gums that may cover part of the teeth
- Adrenal glands: changes related to hormone imbalance, such as unusual body development, menstrual changes, or problems controlling salt and fluids
- Parathyroid glands: symptoms caused by high calcium, including thirst, constipation, kidney stones, or weakness

Causes and risk factors

Hyperplasia happens when signals tell cells to divide more often than usual. The reason differs between tissues.

Hormones are a common cause. The uterine lining, breast, prostate, thyroid, parathyroid, and adrenal glands all respond to hormonal signals. Excess stimulation or an imbalance between hormones may lead to cell overgrowth.

Long-term irritation or inflammation can also encourage cells to multiply. Gum enlargement, for example, may be worsened by plaque and ongoing inflammation. Some tissues grow in response to extra work or loss of nearby tissue. This is known as compensatory hyperplasia .

Certain medicines can contribute to specific forms of hyperplasia. These include some medicines associated with gum enlargement and some hormone treatments. Do not stop a prescribed medicine because you are concerned about hyperplasia. A healthcare professional can assess whether it may be contributing and whether an alternative is appropriate.

Some types are inherited. Congenital adrenal hyperplasia is a group of genetic conditions affecting enzymes needed to make adrenal hormones. The resulting hormone signals can cause the adrenal glands to enlarge. Inherited forms are not caused by lifestyle or anything someone did during pregnancy.

Risk factors are specific to the organ involved. For example, factors that increase prolonged estrogen stimulation can raise the chance of endometrial hyperplasia, while ageing and hormonal changes are linked with benign prostate enlargement. A risk factor does not mean that hyperplasia will develop.

Diagnosis

The first step is identifying where the change is and why it may be happening. Your assessment may include a discussion of symptoms, menstrual or urinary patterns, medicines, family history, and previous test results.

An examination may find an enlarged organ, thickened tissue, or a lump. Blood or urine tests can look for hormone changes, impaired organ function, infection, blood loss, or other possible causes.

Imaging may show that a tissue is enlarged or thickened. Ultrasound is commonly used for the uterine lining, thyroid, prostate, and some abdominal organs. Mammography or other breast imaging can identify areas that need further assessment. Imaging alone cannot always tell hyperplasia from other tissue changes.

A biopsy removes a small tissue sample for examination under a microscope. It is often the best way to confirm hyperplasia and determine whether atypical cells are present. The pathology report should identify the tissue and may describe the hyperplasia as typical, non-atypical, atypical, simple, complex, focal, or diffuse. The terminology differs by organ.

Some forms are diagnosed mainly through hormone tests and genetic testing. Congenital adrenal hyperplasia is one example. Benign prostate enlargement is often assessed from symptoms, examination, urine tests, and other investigations; a biopsy is not routinely required

simply to confirm enlargement.

If a report says "hyperplasia," ask which type was found, whether atypia is present, and what follow-up is recommended. Those details are more informative than the word alone.

Treatment and management

Treatment is based on the affected organ, the cause, your symptoms, and whether the cells show atypia. Hyperplasia that is normal, mild, or unlikely to cause harm may only need observation.

Monitoring can include symptom reviews, repeat blood tests, imaging, or another biopsy. Follow-up is especially important when cells are atypical or when the tissue cannot be assessed fully from the first sample.

Medicines may reduce the signal driving cell growth, correct a hormone imbalance, or ease pressure-related symptoms. For example, hormone treatment may be used for some forms of endometrial hyperplasia, while medicines may improve urinary symptoms from benign prostate enlargement. Treatment choices have different benefits and side effects, so they are selected for the specific condition.

If a prescribed medicine appears to be contributing, the prescriber may adjust it or choose an alternative. This should be done safely rather than by stopping treatment suddenly.

A procedure or operation may be considered when enlarged tissue blocks normal function, causes persistent bleeding, has a meaningful risk of becoming cancer, or cannot be monitored reliably. Surgery may remove only the overgrown tissue or, in some situations, the affected organ.

Treating hyperplasia does not always mean treating cancer. However, if a biopsy finds cancer as well as hyperplasia, care follows the recommendations for that cancer.

Complications

Many forms of hyperplasia remain benign and cause few problems. Complications, when they occur, depend on the tissue involved.

Enlarged tissue can press on or block nearby structures. Prostate enlargement may obstruct urine flow, leading to urinary retention, infections, bladder problems, or kidney damage. Enlarged gums can make cleaning difficult and contribute to inflammation.

Hyperplasia of hormone-producing glands may lead to too much or too little of a hormone. This

can affect blood pressure, growth, sexual development, bones, kidneys, or metabolism, depending on the gland.

Repeated or heavy uterine bleeding can cause iron-deficiency anaemia. This means the body does not have enough iron to make healthy red blood cells, which may cause tiredness, breathlessness, or dizziness.

Atypical hyperplasia in certain tissues can progress to cancer and may already be present near an unrecognised cancer. This concern is particularly important in the uterine lining and some breast lesions. The level of risk is not the same for every organ or pathology result.

Prevention

Hyperplasia cannot always be prevented. Normal compensatory changes and inherited conditions, including congenital adrenal hyperplasia, are not preventable through lifestyle choices.

For forms linked to a medicine, regular medication reviews may help identify tissue changes early. Do not stop prescribed treatment without medical advice.

Good oral hygiene and regular dental care may reduce inflammation that worsens some types of gum enlargement, although they may not remove medication-related overgrowth.

Some hormone-related forms may be less likely when hormone treatment is chosen and monitored appropriately. The suitable approach depends on the tissue, your health history, and the reason hormones are being used.

Attending recommended screening and follow-up does not prevent every case. It can help find relevant changes before they cause major symptoms or complications.

Living with it and what to expect

What happens over months and years is mainly determined by the type of hyperplasia. A temporary response may shrink after the trigger ends. Other forms stay stable, recur, or slowly become more noticeable.

Benign enlargement can be long-lasting without becoming cancer. Symptoms may change as the tissue grows or as nearby organs are affected. Treatment often focuses on preserving normal function and reducing bleeding, pressure, or hormone-related effects.

If hyperplasia is being monitored, keep scheduled appointments even when you feel well. Changes seen on a scan or biopsy may occur without obvious symptoms. Bring an updated

medicine list and report new bleeding, urinary problems, lumps, or hormone-related symptoms.

A diagnosis involving atypical cells may require closer surveillance or treatment. This does not mean cancer is certain. It means the cell pattern deserves more attention because its behaviour can be less predictable.

Most people can continue their usual activities. The practical impact may involve taking medicine, attending repeat tests, managing symptoms, or recovering from a procedure. Your follow-up plan should state what is being monitored, how often it will be checked, and which changes should prompt an earlier review.

When to get medical help

Arrange a routine appointment if you develop a new lump, persistent swelling, changes in urination, enlarged or bleeding gums, or unexplained changes that may relate to hormones.

Vaginal bleeding should be assessed if it is unusually heavy, repeatedly occurs between periods, develops after sex, or happens after menopause. Seek advice sooner if bleeding is increasing or causing tiredness or dizziness.

Contact your healthcare team promptly if known hyperplasia causes new symptoms, existing symptoms worsen, or you miss planned monitoring. A new pathology result mentioning atypia also needs timely follow-up, but it is not usually an emergency by itself.

Seek urgent medical care if you:

Call emergency services for collapse, severe breathing difficulty, confusion, or uncontrolled bleeding.

- Cannot pass urine despite a painful or full-feeling bladder
- Have heavy bleeding with faintness, marked weakness, or shortness of breath
- Develop severe pain, fever, vomiting, or rapidly increasing swelling
- Have signs of a serious hormone or salt imbalance, such as confusion, collapse, or severe dehydration

Common questions

Is hyperplasia cancer?

No. Hyperplasia means there are more cells than usual, while cancer involves uncontrolled abnormal growth that can invade nearby tissue. Some atypical forms can increase cancer risk

or be found near cancer, so the exact biopsy result matters.

Can hyperplasia go away on its own?

Sometimes. A normal or reactive hyperplasia may shrink when hormonal stimulation, inflammation, or another trigger ends. Long-standing, inherited, or structurally established forms may remain and need monitoring or treatment.

What does "hyperplasia without atypia" mean?

It means the tissue contains extra cells, but those cells do not show the abnormal microscopic features called atypia. This is generally less concerning than atypical hyperplasia, although follow-up may still be needed.

What does "atypical hyperplasia" mean?

It means the cells have abnormal features as well as increased growth. In certain tissues, this is considered a precancerous change. It is not the same as a confirmed invasive cancer, but it often leads to closer assessment or treatment.

Is hyperplasia the same as an enlarged organ?

Not always. An organ can enlarge because its cells have multiplied, because individual cells have grown larger, or because of inflammation, fluid, a cyst, or a tumour. Tests may be needed to identify the reason.

Can hyperplasia come back after treatment?

Yes, some forms can return, particularly if the underlying hormonal or inflammatory signal continues. Follow-up may be recommended after medicines, procedures, or surgery to check symptoms and tissue changes.

Sources

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