CONDITION

Hygroma colli

Hygroma colli is a fluid-filled neck swelling caused by lymphatic vessels that did not form normally before birth.

WHAT IT IS
Congenital lymphatic malformation forming fluid-filled spaces, usually in the neck

BODY SYSTEM
Lymphatic system and nearby neck tissues

MAIN SYMPTOMS
Soft swelling, skin discoloration, swallowing difficulty, breathing difficulty

WHAT CAUSES IT
Abnormal lymph vessel development before birth

HOW IT IS DIAGNOSED
Prenatal ultrasound, or ultrasound and MRI after birth

MAIN TREATMENT
Observation, sclerotherapy, surgery, or specialist medicines

CAN IT BE CURED?
Sometimes - localized malformations may be completely removed

IS IT AN EMERGENCY?
Sometimes - breathing difficulty or sudden swelling needs emergency care

LONG-TERM OUTLOOK
Often manageable, though regrowth and repeat treatment are possible

Overview

Hygroma colli is a lymphatic malformation in the neck. It forms when parts of the lymphatic system do not develop normally before birth.

The lymphatic system is a network of vessels that collects excess fluid from tissues and helps the immune system respond to infection. In hygroma colli, lymph fluid collects in abnormal spaces or cysts. These spaces may be small and closely grouped, or they may form one or more larger sacs.

The term is often used for a cystic neck swelling found during a pregnancy ultrasound. After birth, health professionals usually call the condition a lymphatic malformation. It is not cancer, and it cannot spread from one person to another.

Some malformations are small and cause few problems. Others extend through the neck, tongue, chest, or nearby tissues. Their importance depends on their size, location, growth, and whether they affect breathing, swallowing, speech, or movement.

When hygroma colli is found before birth, it can sometimes be associated with chromosome differences, genetic conditions, heart problems, or fluid buildup in the fetus. However, the ultrasound finding alone does not confirm any of these conditions.

Symptoms

Before birth, hygroma colli usually causes no symptoms that the pregnant person can feel. It is found during an ultrasound scan, often as a fluid-filled area around the back or sides of the fetal neck.

After birth, possible signs include:

A malformation may be visible at birth, or it may first become noticeable later in childhood. A small malformation can enlarge after an infection, inflammation, injury, or bleeding into one of its fluid spaces.

Pain is not always present. New pain, warmth, redness, tenderness, or rapid enlargement can suggest infection or bleeding and needs prompt assessment.

- A soft or compressible swelling in the neck
- Swelling that becomes more noticeable during an infection
- Bluish, pink, or otherwise discolored skin over the area
- Difficulty swallowing, feeding, speaking, or moving the neck
- Noisy or difficult breathing if the airway is affected

Causes and risk factors

Hygroma colli develops because lymphatic vessels fail to connect or drain in the usual way during early development. Trapped lymph fluid then collects in abnormal spaces.

In many children, the exact reason this happened is not known. Nothing a parent did during pregnancy is known to cause an isolated lymphatic malformation.

Most lymphatic malformations are not passed directly from parent to child. Some contain acquired changes in genes that control cell growth, including changes affecting the PIK3CA pathway. These changes occur in some cells during development rather than being present

throughout the body.

A fetal hygroma can also occur with a chromosome or genetic condition. Associations include Turner syndrome, Down syndrome, trisomy 18, trisomy 13, and Noonan syndrome. An association means the finding raises the chance of one of these conditions; it does not establish a diagnosis.

The outlook is also influenced by other ultrasound findings. These may include heart differences, abnormal growth, or hydrops. Hydrops means excessive fluid has collected in at least two areas of the fetus, such as under the skin or around the heart or lungs.

Diagnosis

Hygroma colli may first be identified during a routine pregnancy ultrasound. It often appears as a fluid-filled, divided swelling around the fetal neck. It is different from an increased nuchal translucency, which is a measurement of fluid at the back of the neck early in pregnancy, although the findings can be related.

A more detailed ultrasound is usually used to assess the swelling and look at fetal growth, anatomy, and signs of hydrops. A fetal echocardiogram, which is a detailed ultrasound of the fetal heart, may also be offered.

Because a fetal hygroma can be associated with chromosome or genetic conditions, genetic counseling and diagnostic testing may be discussed. Chorionic villus sampling tests placental tissue, while amniocentesis tests cells from the fluid surrounding the fetus. These tests provide different information from screening blood tests. The choice to have testing is personal.

After birth, diagnosis starts with an examination. Ultrasound can show whether the swelling contains fluid and how its spaces are arranged. MRI uses a magnetic field to map the malformation and its relationship to muscles, nerves, blood vessels, the airway, and deeper parts of the neck. MRI does not use X-rays.

A biopsy is not routinely needed when the examination and imaging are typical. It may be considered if the diagnosis remains uncertain.

Treatment and management

Treatment is based on symptoms, location, and the structures involved. A team may include specialists in vascular anomalies, ear, nose and throat care, radiology, surgery, genetics, fetal medicine, and speech or feeding support.

A small malformation that is not causing symptoms may be monitored. Follow-up checks whether it is growing or beginning to affect nearby structures.

Sclerotherapy is a common treatment for larger fluid spaces. During this image-guided procedure, a specialist drains fluid and places a medicine into the abnormal spaces. This causes irritation and scarring so the spaces shrink. More than one session may be needed. Temporary pain and swelling can occur afterward.

Surgery may be considered when the malformation is localized, causes ongoing symptoms, or has not responded enough to other treatment. Complete removal is not always safe because the abnormal spaces can wrap around nerves, blood vessels, muscles, or the airway. Leaving a small part behind may protect these structures but allows the possibility of regrowth.

Medicine that acts on cell-growth pathways may be considered for extensive or difficult-to-treat lymphatic malformations. Sirolimus is one example used by specialist teams. It requires careful monitoring because it can affect the immune system, blood cells, cholesterol, and other body functions.

Infection may require antibiotics like amoxicillin or doxycycline . Feeding therapy, temporary nutritional support, airway treatment, pain relief, or skin care may also be needed.

If a large fetal hygroma could obstruct breathing at birth, delivery may be planned at a specialist hospital. Most fetal cases do not require a procedure before birth.

Complications

Possible complications depend on where the malformation extends. They can include:

Treatment also has risks. Sclerotherapy can cause swelling, skin or nerve injury, and infection. Surgery may affect nearby nerves, blood vessels, or muscles. The treating team should explain the expected benefits and risks of a proposed procedure.

During pregnancy, a large hygroma associated with hydrops or major chromosome, genetic, or structural differences can have a poor outlook. Cases that become smaller and have no associated findings generally have a more favorable outlook, but no single scan can guarantee an outcome.

- Airway narrowing or breathing difficulty
- Problems with swallowing, feeding, speech, or neck movement
- Infection within the malformation
- Bleeding into a fluid space, causing pain and sudden enlargement

- Leakage of lymph fluid through the skin
- Regrowth after sclerotherapy or surgery
- Effects on appearance, confidence, or social wellbeing

Prevention

Hygroma colli cannot usually be prevented. It results from changes in lymphatic development that occur early before birth.

There is no evidence that routine activity, food, stress, or something a parent did caused an isolated lymphatic malformation. When a genetic condition is identified, genetic counseling can explain whether it may affect a future pregnancy.

Living with it and what to expect

The course differs according to the malformation's size, depth, and location. Some remain small for years. Others grow gradually with the child or enlarge during illness, inflammation, puberty, pregnancy, injury, or bleeding.

A malformation does not become cancer. However, treatment does not always remove every abnormal lymphatic channel. Swelling can return months or years later, so some people need repeat imaging or treatment.

Children with limited malformations often take part in usual school, play, and family activities. Those with extensive neck or facial involvement may need longer-term support with feeding, speech, dental care, breathing, or appearance. Emotional support can be useful if visible swelling affects confidence or attracts unwanted attention.

Follow-up is usually routine when the swelling is stable and not affecting body functions. Appointments may become less frequent over time, although review is still useful after a new flare or treatment.

For a hygroma found before birth, repeat ultrasound scans may show that it becomes smaller, remains present, or progresses. The longer-term outlook is shaped more by associated genetic or structural findings and the presence of hydrops than by the name of the ultrasound finding alone.

When to get medical help

Arrange a routine medical review if a known or suspected neck swelling is slowly growing, repeatedly becomes inflamed, or begins to affect eating, speech, sleep, movement, or daily activities.

Seek prompt medical advice for:

Call emergency services for difficulty breathing, severe noisy breathing, blue or grey lips, inability to swallow saliva, sudden severe swelling around the mouth or neck, or marked sleepiness with breathing problems.

During pregnancy, contact the maternity team promptly if a scan has shown hygroma colli and new symptoms such as bleeding, contractions, fluid leakage, or reduced fetal movement occur. These symptoms are not specific to hygroma colli but need pregnancy assessment.

- New pain, tenderness, redness, or warmth
- A rapid increase in swelling without breathing difficulty
- Fever or discharge from the swelling
- New difficulty swallowing or reduced feeding
- Increased swelling after an injury

Common questions

Is hygroma colli cancer?

No. It is a malformation of lymphatic vessels, not a cancerous growth. It may extend between tissues and return after treatment, but it does not spread through the body like cancer.

Can a fetal hygroma go away before birth?

Some become smaller or are no longer visible on later scans. Others persist or are associated with additional findings. Follow-up ultrasound and any offered genetic or heart assessment help provide more information about the outlook.

Does hygroma colli mean my baby has a chromosome condition?

Not necessarily. It increases the chance of certain chromosome and genetic conditions, but ultrasound cannot confirm them. Diagnostic testing of placental tissue or amniotic fluid can provide clearer information if testing is chosen.

Can hygroma colli come back after treatment?

Yes. Abnormal lymphatic channels can remain even after the visible swelling has shrunk or been removed. Recurrence does not always mean treatment failed; another procedure or a different treatment may be considered.

Can an adult develop hygroma colli?

The underlying malformation is usually present from birth, but a small one may not be noticed until adulthood. Infection, injury, bleeding, or hormonal changes can make it enlarge. A new adult neck swelling still needs assessment because many other conditions can cause one.

Can someone with hygroma colli live a usual life?

Many people with small or successfully treated malformations have few limits on daily life. Extensive malformations may require repeated treatment and support for breathing, swallowing, speech, movement, or appearance. Individual outcomes are shaped by the tissues involved and any associated conditions.

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