



## Swelling of the Belly

By: The Canadian Virtual Hospice Team

### What is swelling of the belly?

#### Belly swelling

The belly is the area of the body that includes all the digestive organs – stomach, intestines, pancreas, liver, gallbladder, kidneys, and spleen.

*Belly swelling* simply means that this area has become larger than is normal.

#### Ascites

Sometimes this swelling happens because an abnormal amount of fluid is collecting in the belly area. This build-up of liquid is called *ascites*. The liquid is usually a clear fluid that's yellowish in color.

Ascites happens when body fluids don't move properly through the body. Instead, the fluid fills the space between the wall of the belly and the tissue surrounding the digestive organs (*peritoneum*).

A small amount of fluid doesn't usually cause discomfort. However, as it builds up, people might experience:

- Bloating or belly pain.
- Shortness of breath if the fluid presses on the *diaphragm* (a muscle that separates the chest from the belly and helps with breathing).

### Causes of swelling in the belly

Swelling in the belly can have various causes, including:

- Advanced stages of illnesses such as:
  - Cancer.
  - Liver disease.
  - Heart disease.
  - Kidney disease.
- Infection.
- Digestive system problems.
- Lymphatic system problems.
- Disorders of the pancreas.

#### Advanced illness

People with an advanced illness often have less albumin (a kind of protein) in their blood. This causes fluid to leak out of blood vessels into the belly.

Cancer may create swelling in various ways. For example,

- A tumour might be blocking:
  - The flow of body fluids through the body.

- The flow of blood through the body.
- The flow of blood to an organ, preventing it from working properly.
- The digestive tract, causing constipation or limiting the flow of food or fluids through the intestines.
- A tumour might be growing so large that it takes up a lot of space in the belly.
- Cancer cells may be irritating the lining of the belly, causing too much fluid to be produced.
- The cancer might be spreading to another organ.

## **Liver disease**

Liver disease can bring about swelling in two ways:

- The veins bringing blood to the liver may have high blood pressure (known as *portal hypertension*). This causes the liver not to work well and can lead to a build-up of fluid in the belly.
- The liver isn't making enough of the proteins that travel in the blood. As a result, fluid leaks out of blood vessels into the belly.

## **Heart disease**

When the heart isn't able to pump blood effectively, fluid builds up and the belly can swell.

## **Kidney disease**

When the kidneys aren't able to make enough urine, fluid builds up in various parts of the body, including the belly.

## **Infection**

Infection can cause inflammation and impacts:

- How well an organ is functioning.
- How fluid is moving in the belly.

An infection of the *peritoneum* (the thin sheet of tissue around the organs in the belly) can lead to fluid buildup.

## **Digestive system problems**

These include:

- Blockage of the intestines, preventing food and fluid from passing through and being digested.
- Irritation of the stomach lining or the lining of the intestines. This irritation can be caused by:
  - Radiation treatments.
  - Infections.
  - Some medications.

## **Lymphatic system problems**

When lymph glands are blocked, fluid can't drain properly from the belly.

## **Disorders of the pancreas**

- An inflamed pancreas (*pancreatitis*) causes fluid to build up.
- Pancreatic cancer can block the flow of fluid.

## **Swelling in the belly and emotions**

As well as causing physical distress, swelling in the belly is emotionally stressful and exhausting.

- It's hard for someone who's physically uncomfortable to enjoy life.
- Some people become isolated. They stay home and don't socialize with friends because they:



- Are in pain.
  - Feel self-conscious about their large belly.
  - Find movement difficult and uncomfortable.
  - Are short of breath as their swollen belly presses against their diaphragm, making it difficult to breathe.
- This physical and emotional distress may lead to depression.

Healthcare providers can help determine the best approach to manage swelling of the belly and help with a person's emotions. It's important to discuss both with them.

## Assessing and diagnosing

Your healthcare provider will want to understand what's causing the swelling for several reasons:

- Swelling may be a sign of an illness you don't know you have.
  - For example, if it's discovered you have cancer, treating the illness may help to decrease the swelling.
- The medications and other treatment they recommend will depend on the cause.
- Without treatment, troublesome symptoms might develop, such as pain or shortness of breath.

To learn more about swelling, your healthcare provider will probably ask questions, do a physical exam and may run some tests. This will help them decide how best to manage these symptoms.

## Questions

- When did the swelling start and how quickly has it worsened?
- What does it feel like?
- Is the swelling causing other problems?
  - Trouble breathing?
  - Pain or discomfort?
  - Problems moving?
  - Difficulty when lying down?
  - Difficulty sitting comfortably?
  - Weakness?
  - Loss of appetite?
  - Nausea or vomiting?
  - Indigestion or heartburn?
  - Bloating?
  - Needing to urinate often?
  - Constipation?
  - Clothes feeling tight?
  - Belly button sticking out or becoming flat?
  - Ankle or leg swelling?
  - Feeling satisfied with just a small amount of food?
  - Weight gain?
  - Sleep problems?
- What medications are you taking to help with the swelling?
  - When do you take them?
  - How long have you been taking them (days, weeks, months)?
  - Are they working?
  - How long do they work?
  - Are you having any side effects?
- Does the swelling interfere with your normal activities?
- What other medications are you taking?
  - Prescription medications?

- Over-the-counter medications?
- Herbal medications and naturopathic remedies?
- What else are you doing to help the swelling?
  - Relaxation techniques?
  - Movement?
  - Trying different positions?

## Physical exam

Your healthcare provider will likely do a fairly complete physical exam as there are many possible causes of abdominal swelling. This will probably include measuring your belly.

## Tests

A number of tests may be done to help sort out possible causes. For example:

- *Blood tests* to look for chemical imbalances in the blood such as:
  - Low *albumin* (a protein found in the blood).
  - Weakness of liver or kidney function.
  - High white blood cell count.
  - Sodium and potassium (known as *electrolytes*).
- *X-rays* to check:
  - For blockages or air in the intestine.
  - For the presence of tumours.
  - On the condition of the heart and other organs.
- *Ultrasound* to look at:
  - Levels of fluid in the belly.
  - Where the fluid is collecting.
- *CT scans* to check:
  - For a blockage in the intestines or growth of a tumour.
  - The level of fluid and where it's collecting.
- *Fluid (ascites) samples* to look for:
  - An infection.
  - Cancer cells.

## Medications and other treatment

While swelling in the belly can take away from quality of life, medications and other treatment may help to manage the swelling and other symptoms that developed as a result.

Medications and treatments are chosen to target the most likely cause, or to work in general ways to reduce the symptom.

### Medications

Medications include:

- Diuretics (often called water pills)
  - These may help to remove water and salt from your body.
  - They work by increasing the amount of urine produced by the kidneys.
- Steroids
  - These may help reduce the swelling around a tumour that may be blocking the flow of fluids



of fluids.

- Bowel stimulants
  - These help the bowels to move if constipation is thought to be causing the swelling.
- Chemotherapy
  - This may help to reduce the size of a tumour that may be blocking the flow of fluids.

## **Other treatments**

Other treatments may include:

- Dietary changes
  - Your healthcare provider may recommend a diet low in salt and liquid depending on the cause of your ascites.
- No alcohol
  - Since *cirrhosis* may be made worse by alcohol, your healthcare provider will probably recommend no alcohol to avoid more damage to the liver.
- Draining the fluid (paracentesis)
  - The built-up fluid is removed from the abdominal cavity by:
    - Numbing the area with a local anesthetic, then
    - Inserting a needle or catheter into the belly, which is used to drain the fluid.
  - This treatment may be done more than once. If it's needed frequently to control the swelling, a permanent drain may be considered.
- Radiation
  - Radiation may decrease the size of a tumour that may be blocking the flow of fluids.
- Surgery
  - For a blockage of the intestine –
    - To remove a tumor or part of the bowel.
    - To reroute the bowel to the outside of the body in the belly area (the medical term for this treatment is *stoma*). A plastic pouch fits over the stoma to collect stool.
  - For a blockage in blood flow to the liver –
    - A permanent tube (*shunt*) may be inserted to reroute blood flow.
  - For liquid build-up in the belly (*ascites*) –
    - A permanent tube (*catheter*) may be placed in the belly to drain the fluid build-up.
  - For a problem due to end-stage liver disease –
    - A liver transplant may be an option.

## **Possible side effects of medication for swelling in the belly**

### **Electrolyte imbalance**

- Electrolytes are salts and minerals found in the blood and body fluids.
- Some diuretics (water pills) can affect the balance of the salts and minerals.
- Regular blood work may be necessary to keep a check on this balance.

### **Nausea and vomiting**

- Some chemotherapies may upset the body and digestive system, causing nausea and vomiting.

Be sure to let your healthcare provider know if you have any of these side effects.

### **Possible side effects of steroids**

Steroids may cause a variety of side effects, some of which are seen almost immediately, and some of which are seen after longer term use.

**Short-term side effects** include:

- Agitation.
- Restlessness.
- Interrupted sleep.
- Increased blood sugars.
- Increased appetite.
- Increased bleeding if steroids are used with non-steroidal anti-inflammatory drugs (NSAIDs).
- Thrush

**Long-term side effects** are:

- Weight gain.
- Muscle weakness.
- *Osteoporosis.*
- *Osteonecrosis (extremely rare).*

Be sure to let the healthcare provider know if there are any concerning side effects.

### **When swallowing medication is difficult**

Sometimes people who are seriously ill have difficulty swallowing medication. In this case:

- Liquid drops may be given under the tongue.
- Medication may be delivered into the body by a plastic tube inserted under the skin, or into the veins.
- Prescription pain patches may be applied to the skin.

To learn more, go to [Help with medications.](#)

### **Complementary therapies**

There are many complementary therapies that might help with any emotional distress caused by swelling of the belly.

These may include:

- Acupuncture.
- Biofeedback.
- Breathing and relaxation techniques.
- Distraction.
- Hypnosis.
- Massage.
- Meditation.
- Music therapy.

Before trying a complementary therapy:

- Talk with your healthcare provider in case they have concerns about a certain therapy and your particular health circumstances. For example:



- Some herbal remedies may affect how well your prescribed medications work.
- Consider experimenting with the different approaches until a helpful one is found.
- A therapy that works for one person might not work for another.

## What you can do

### Urgent situations:

Seek medical attention immediately for any of the following:

- Severe pain in the belly.
- Severe shortness of breath.

### *When you are living with illness*

Living with serious illness can be physically, mentally, spiritually, and emotionally challenging. In this section, you'll find suggestions that may help you manage these stressful times.

### Talk with your healthcare provider

- Tell them about your swelling and how this is affecting you.
- Show them your symptom diary.
- Talk about your symptoms and answer your healthcare provider's questions. The more they know, the better they can help you to manage this condition.

### TIP:

Keep track of your symptoms in a [daily symptom diary](#). Sharing this information with your healthcare provider will help them to help you.

### Find support

Many people find it helpful to connect with others when they're living with illness. These are some suggestions to consider.

- Talk with someone you trust, like a friend or family member. Sometimes just talking with someone can help you.
- Ask your healthcare provider to refer you to a counsellor such as a psychologist or social worker. They can offer:
  - Counselling and emotional support.
  - Education.
  - Practical suggestions to help you manage your symptoms.
- Talk with a [spiritual care](#) specialist.
- Find information online.
  - Canadian Virtual Hospice has information on many topics related to serious illness and [palliative care](#).
- Join online discussion forums such as:
  - [Canadian Virtual Hospice Discussion Forums](#).
  - [Cancer Chat Canada](#).
- If you are able, consider joining a support group where you may meet with people with the same health concerns.
- Learn more about [Programs and Services](#) in your area.

### *When someone you care about is living with illness*

It can be difficult to watch someone important to you face a serious illness. Helping this person with

symptoms such as pain, constipation, nausea, and vomiting can be exhausting. It can also lead to feelings of isolation when others around you don't appreciate the challenge of caring for someone with these symptoms. The following suggestions might help you through this difficult time.

### **Find support**

Many people find it helpful to connect with others when they are supporting someone who is ill. These are some suggestions to consider.

- Talk with someone you trust. Sometimes just talking with a friend or family member can help.
- Ask the healthcare provider to refer you to a counsellor such as a psychologist or social worker. They can offer:
  - Counselling and emotional support.
  - Education.
  - Practical suggestions to help with stress.
- Talk with a spiritual care specialist.
- Ask about a support group for caregivers.
- Find information online.
  - Canadian Virtual Hospice has information on many topics related to serious illness and palliative care.
- Join online discussion forums such as:
  - [Canadian Virtual Hospice Discussion Forums.](#)
  - [Cancer Chat Canada.](#)
- Learn more about [Programs and Services](#) in your area.

### **Try complementary therapies**

- Various therapies such as relaxation techniques, meditation and yoga can be helpful to manage stress.

### **Take time for yourself**

- Choose an activity or something you enjoy. It might be reading, praying, listening to music, watching sports – or something else.
- Regular exercise is important to manage stress. What physical activities do you enjoy? Walking? Biking? Something else?

### **Respecting choices**

You might disagree with the choices someone makes about treatments and how they live with their illness. Perhaps you feel their choices are unsafe, might cause harm, or risk losing an opportunity to get better. This can be frustrating and upsetting. It's okay to tell this person, respectfully, how you feel about their choices and how they affect you – but remember, everyone has the right to make their own decisions.

*If you're concerned this person is no longer able to make good choices, or that their choices may be putting others at risk, speak to the healthcare provider.*