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Treating Gallbladder Cancer

If you've been diagnosed with gallbladder cancer, your treatment team will discuss your options with you. It's important to weigh the benefits of each treatment option against the possible risks and side effects.

How is gallbladder cancer treated?

The main types of treatments for gallbladder cancer include:

- [Surgery for Gallbladder Cancer](#)
- [Radiation \(Surgery for Gallbladder Cancer\)](#)
- [Chemotherapy for Gallbladder Cancer](#)
- [Targeted Therapy Drugs for Gallbladder Cancer](#)

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Based on your treatment options, you may have different types of doctors on your cancer care team. These may include:

- A **surgeon** or a **surgical oncologist**: a surgeon who specializes in cancer treatment
- A **radiation oncologist**: a doctor who uses radiation to treat cancer
- A **medical oncologist**: a doctor who uses chemotherapy and other medicines to treat cancer
- A **gastroenterologist (GI doctor)**: a doctor who treats diseases of the digestive system

You might have many other specialists on your treatment team as well, including physician assistants, nurse practitioners, nurses, nutrition specialists, social workers, and other health professionals.

- [Health Professionals Who Are Part of a Cancer Care Team](#)

Making treatment decisions

It's important to discuss all treatment options, including their goals and possible side effects, with your doctors to help make the decision that best fits your needs. You may feel that you need to make a decision quickly, but it's important to give yourself time to absorb the information you have learned. Ask your cancer care team questions.

If time permits, it is often a good idea to seek a second opinion. A second opinion can give you more information and help you feel more confident about the treatment plan you choose.

- [Questions to Ask About Gallbladder Cancer](#)
- [Seeking a Second Opinion](#)

Thinking about taking part in a clinical trial

Clinical trials are carefully controlled research studies that are done to get a closer look at promising new treatments or procedures. Clinical trials are one way to get state-of-the-art cancer treatment. In some cases they may be the only way to get access to newer treatments. They are also the best way for doctors to learn better methods to treat cancer.

If you would like to learn more about clinical trials that might be right for you, start by

asking your doctor if your clinic or hospital conducts clinical trials.

connect with one of our specialists.

- [Palliative Care](#)
- [Programs & Services](#)

Choosing to stop treatment or choosing no treatment at all

For some people, when treatments have been tried and are no longer controlling the cancer, it could be time to weigh the benefits and risks of continuing to try new treatments. Whether or not you continue treatment, there are still things you can do to help maintain or improve your quality of life.

Some people, especially if the cancer is advanced, might not want to be treated at all. There are many reasons you might decide not to get cancer treatment, but it's important to talk to your doctors as you make that decision. Remember that even if you choose not to treat the cancer, you can still get supportive care to help with pain or other symptoms.

People who have advanced cancer and who are expected to live less than 6 months may want to consider hospice care. Hospice care is designed to provide the best possible quality of life for people who are near the end of life. You and your family are encouraged to talk with your doctor or a member of your supportive care team about hospice care options, which include hospice care at home, a special hospice center, or other health care locations. Nursing care and special equipment can make staying at home a workable option for many families.

- [If Cancer Treatments Stop Working](#)
- [Hospice Care](#)

The treatment information given here is not official policy of the American Cancer Society and is not intended as medical advice to replace the expertise and judgment of your cancer care team. It is intended to help you and your family make informed decisions, together with your doctor. Your doctor may have reasons for suggesting a treatment plan different from these general treatment options. Don't hesitate to ask your cancer care team any questions you may have about your treatment options.

Surgery for Gallbladder Cancer

There are 2 general approaches to surgery for gallbladder cancer:

If the cancer is **resectable**, meaning the doctor believes it can be removed completely, then **potentially curative surgery**

Often, when gallbladder cancer is suspected, the surgeon will do a laparoscopy before any other surgery. This is done to help look for any spread of the cancer that could make curative surgery not an option. This procedure is described in [Tests for Gallbladder Cancer](#)³. During the laparoscopy, the surgeon can look for areas of cancer that did not show up on imaging tests. If the cancer is resectable, laparoscopy can also help plan the operation to remove it.

Surgery to remove gallbladder cancer can have serious side effects and, depending on how extensive it is, you may need many weeks for recovery. If your cancer is very unlikely to be curable, be sure to carefully weigh the pros and cons of surgery or other treatments that will need a lot of recovery time.

It's very important to understand the goal of any surgery for gallbladder cancer, what the possible benefits and risks are, and how the surgery is likely to affect

size. But this type of operation isn't used if gallbladder cancer is suspected. This surgery gives the surgeon only a limited view of the area around the gallbladder, so there's a greater chance that some cancer might be missed and left behind. Removing the gallbladder this way might also lead to the accidental spread of the cancer as the gallbladder is taken out.

Open cholecystectomy: The surgeon takes out the gallbladder through a large incision (cut) in the abdominal wall. This method is sometimes used for gallbladder problems that aren't cancer (such as gallstones), and may lead to the discovery of gallbladder cancer. But if gallbladder cancer is suspected before surgery, doctors prefer to do an extended cholecystectomy.

Extended (radical) cholecystectomy

Because of the risk that the cancer will come back if just the gallbladder is removed, a more extensive operation, called an **extended (or radical) cholecystectomy**, is done in most cases of gallbladder cancer. This can be a complex operation, so make sure your surgeon is experienced with it.

The extent of the surgery depends on where the cancer is and how far it might have spread. At a minimum, an extended cholecystectomy removes:

- The gallbladder
- About an inch or more of liver tissue next to the gallbladder
- All of the lymph nodes in the region (at minimum, 6 lymph nodes need to be removed to properly stage the cancer)

If your surgeon feels it's needed and you are healthy enough, the operation might also include removing one or more of the following:

- A larger part of the liver, ranging from a wedge-shaped section of the liver close to the gallbladder (wedge resection) to a whole lobe of the liver (hepatic lobectomy)
- The common bile duct
- Part or all of the ligament that runs between the liver and the intestines
- Lymph nodes around the pancreas and, around the major nearby blood vessels
- The pancreas
- The duodenum (the first part of the small intestine into which the bile duct drains)
- Any other areas or organs to which cancer has spread

Palliative surgery for unresectable cancers

1. www.cancer.org/cancer/managing-cancer/finding-care/seeking-a-second-opinion.html
2. www.cancer.org/cancer/managing-cancer/finding-care/where-to-find-cancer-care.html
3. www.cancer.org/cancer/types/gallbladder-cancer/detection-diagnosis-staging/diagnosis.html
4. www.cancer.org/cancer/managing-cancer/treatment-types/surgery.html
5. www.cancer.org/cancer/managing-cancer/side-effects.html

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Radiation Therapy for Gallbladder Cancer

Radiation therapy uses high-energy rays (such as x-rays) or particles to destroy cancer cells. Doctors aren't sure of the best way to use radiation therapy to treat gallbladder cancer, but it might be used in one of these ways:

- **After surgery has removed the cancer:** Radiation may be used to try to kill any cancer that might have been left after surgery but was too small to see. This is called **adjuvant therapy**.
 - **As part of the main therapy for some advanced cancers:** Radiation therapy might be used as a main therapy for some patients whose cancer has not spread widely throughout the body, but can't be removed with surgery. While treatment in this case does not cure the cancer, it may help patients live longer.
 - **As palliative therapy:** Radiation therapy is used often to help [relieve symptoms](#) if the cancer is too advanced to be cured. It may be used to help relieve pain or other symptoms by shrinking tumors that block blood vessels or bile ducts, or press on nerves.
- [External beam radiation therapy \(EBRT\)](#)
 - [Possible side effects of radiation therapy](#)
 - [More information about radiation therapy](#)

External beam radiation therapy (EBRT)

For external beam radiation therapy (EBRT), a machine sends x-rays to a specific part of the patient's body to kill cancer cells.

Before your treatments start, the radiation team will take careful measurements to determine the correct angles for aiming the radiation beams and the proper dose of radiation. The treatment is much like getting an x-ray, but the radiation is much stronger. The procedure itself is painless. Each treatment lasts only a few minutes, but the set-up time getting you into place for treatment usually takes longer. Most often, radiation treatments are given 5 days a week for many weeks. These are some of the ways EBRT might be given:

- **Three-dimensional conformal radiation therapy (3D-CRT)** uses special

computers to precisely map the location of the tumor(s). Radiation beams are then shaped and aimed at the tumor(s) from several directions, which makes it less likely to damage normal tissues.

- **Intensity modulated radiation therapy (IMRT)** is an advanced form of 3D-CRT. It uses a computer-driven machine that moves around you as it delivers radiation. Along with shaping the beams and aiming them at the cancer from many angles, the intensity (strength) of the beams can be adjusted to limit the dose reaching the most sensitive normal tissues. This lets doctors deliver an even higher dose to the cancer.
- **Chemoradiation** combines chemotherapy (chemo) treatments with EBRT treatments. This can help the radiation work better. In treating gallbladder cancer, chemoradiation is most often used for either unresectable metastatic cancer, or after surgery if cancer is found to have spread to lymph nodes. The main drawback of this approach is that the side effects tend to be worse than with radiation alone. Still, some studies have shown that chemoradiation in these situations may help people live longer.

Possible side effects of radiation therapy

Some common side effects of radiation therapy to treat gallbladder cancer include:

- Sunburn-like skin problems, like redness, blisters, and peeling in the area being treated
- Nausea and vomiting
- Diarrhea
- Fatigue (tiredness)
- Low blood cell counts

Side effects from radiation often start a week or 2 into treatment, and usually get better over time once treatment is over. Ask your doctor or nurse what side effects to expect and how you might prevent or relieve them.

More information about radiation therapy

To learn more about how radiation is used to treat cancer, see [Radiation Therapy](#)¹.

To learn about some of the side effects listed here and how to manage them,

When is chemotherapy used for gallbladder cancer?



Because giving chemo into a vein (IV) isn't always helpful for gallbladder cancer, doctors have studied a different way to give it – right into the main artery going into the liver, called the **hepatic artery**. The hepatic artery also supplies most gallbladder tumors, so putting chemo into this artery means more chemo goes to the tumor. The healthy liver then removes most of the remaining drug before it can reach the rest of the body. This can lessen the chemo side effects. HAI may help some people whose cancer couldn't be removed by surgery live longer, but more research is needed. This technique often requires surgery to put a catheter into the hepatic artery, and many people with gallbladder are not well enough to have this surgery.

Chemo drugs used to treat gallbladder cancer

The drugs used most often to treat gallbladder cancer include:

- Gemcitabine (Gemzar[®])
- Cisplatin (Platinol[®])
- 5-fluorouracil (5-FU)
- Capecitabine (Xeloda[®])
- Oxaliplatin (Eloxatin[®])

In some cases, 2 of these drugs are combined. For example, combining gemcitabine and cisplatin may help people live longer than getting just gemcitabine alone. When chemo is given with radiation, most often 5-FU or capecitabine is used.

Possible chemo side effects

Chemo drugs attack cells that are dividing quickly, which is why they work against cancer cells. But other cells in the body, such as those in the bone marrow (where new blood cells are made), the lining of the mouth and intestines, and the hair follicles, also divide quickly. These cells can be affected by chemo, which can lead to side effects.

The side effects of chemo depend on the type and dose of drugs given, how they're given, and the length of treatment. Side effects can include:

- Hair loss
- Mouth sores
- Loss of appetite
- Nausea and vomiting
- Diarrhea
- Nerve damage (neuropathy), which can lead to numbness, tingling, and even pain in the hands and feet
- Increased chance of infections (from having too few white blood cells)
- Easy bruising or bleeding (from having too few blood platelets)
- Fatigue (from having too few red blood cells)
- Organ dysfunction (can affect function of the kidney and liver)

Ask your cancer care team what you should watch for. Most side effects are short-term and go away after treatment ends. There are often ways to lessen these side effects. For example, drugs can be given to help prevent or reduce nausea and vomiting. Be sure to ask your doctor or nurse about medicines to help reduce side effects.

Report any side effects you notice to your cancer care team so that they can be treated right away. Most side effects can be treated. In some cases, the doses of the chemo drugs can be reduced or treatment can be delayed or stopped to keep the side effects from getting worse.

More information about chemotherapy

For more general information about how chemotherapy is used to treat cancer, see [Chemotherapy](#)¹.

To learn about some of the side effects listed here and how to manage them, see [Managing Cancer-related Side Effects](#)².

Hyperlinks

1. www.cancer.org/cancer/managing-cancer/treatment-types/chemotherapy.html
2. www.cancer.org/cancer/managing-cancer/side-effects.html

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Targeted Therapy Drugs for Gallbladder Cancer

As researchers learn more about the changes in cells that cause gallbladder cancer, they've developed drugs to target some of these changes. These targeted drugs work differently from standard chemotherapy (chemo) drugs. They sometimes work when standard chemo drugs don't, and they often have different side effects.

- [FGFR2 inhibitors](#)
- [IDH1 inhibitor](#)
- [TRK inhibitors](#)
- [RET inhibitors](#)
- [BRAF inhibitor and MEK inhibitor](#)
- [KRAS inhibitor](#)
- [HER2 inhibitor](#)

FGFR2 inhibitors

FGFRs (fibroblast growth factor receptors) are proteins on cells that help them grow and divide normally. A small number of people with gallbladder cancer have changes in the genes that make FGFRs, which result in abnormal FGFR proteins that cause cells to grow out of control and turn into cancer.

Pemigatinib (Pemazyre) and **futibatinib (Lytgobi)** are FGFR2 inhibitors. They block the abnormal FGFR2 protein in gallbladder cancer cells and keep them from growing and spreading to other places.

These drugs can be used to treat some advanced gallbladder cancers that cannot be removed by surgery or have spread to distant areas after at least one previous chemotherapy treatment. For these drugs to work, your cancer must have an abnormal *FGFR2* gene, so your cancer will be tested before starting any of these drugs.

TRK inhibitors. TRK inhibitors target and disable the proteins made by the *NTRK* genes. These drugs can be used in people with advanced gallbladder cancer, who have not received prior systemic therapy.

These drugs are taken as pills, once or twice daily.

Possible side effects of TRK inhibitors

Common side effects can include abnormal liver tests; decreased white blood cell and red blood cells; muscle and joint pain; tiredness; diarrhea or constipation; nausea and vomiting; and stomach pain.

Less common but more serious side effects can include mental changes, such as confusion, changes in mood, changes in sleep; liver damage; changes in heart rhythm and/or function; vision changes; harm to a fetus.

RET inhibitors

In a small percentage of gallbladder cancers, the tumor cells have rearrangement in the *RET* gene that cause them to make an abnormal form of the RET protein. This abnormal protein helps the tumor cells grow.

Selpercatinib (Retevmo) and **pralsetinib (Gayreto)** are RET inhibitors and can be used to treat advanced gallbladder cancers with the RET rearrangement.

These drugs are taken by mouth as capsules, typically once or twice a day.

Possible side effects of RET inhibitors

Common side effects can include dry mouth, diarrhea or constipation, high blood pressure, tiredness, swelling in hands and/or feet, skin rash, muscle and joint pain, low blood cell counts or changes in other blood tests.

Less common but more serious side effects can include liver damage, lung damage, allergic reactions, changes in heart rhythm, bleeding easily, and problems with wound healing.

BRAF inhibitor and MEK inhibitor

In some gallbladder cancers, the cells have changes in the *BRAF* gene. Cells with these

changes make an altered BRAF protein that helps them grow. Some drugs target this and related proteins. A combination of BRAF inhibitor and a MEK inhibitor is often given together to treat advanced cancer with the *BRAF V600E* mutation.

Dabrafenib (Tafinlar) is a BRAF inhibitor. **Trametinib (Mekinist)** is a MEK inhibitor. This drug combination can be used in people with advanced, previously treated gallbladder cancer, if the cancer cells are found to have an *BRAF V600E* mutation.

These drugs are taken as pills or capsules each day.

Possible side effects

Common side effects can include skin thickening, rash, itching, sensitivity to the sun, headache, fever, joint pain, tiredness, hair loss, nausea, and diarrhea.

HER2 inhibitor

Some gallbladder cancers have too much of the HER2 protein on the surface of their cells, which can help cancer cells grow. Having too much of this protein is caused by having too many copies of the *HER2* gene. Cancers with increased levels of HER2 are called **HER2-positive**.

Zanidatamab (Ziihera) is a medicine that attaches to 2 different parts of the HER2 protein. It can be used to treat HER2-positive gallbladder cancer that can't be removed completely or that has spread to other parts of the body, if other treatments have already been tried.

This drug is given as an infusion into a vein (IV), typically once every 2 weeks.

Possible side effects

Some people might have an **infusion reaction** while getting this drug. This is like an allergic reaction, and can include fever, chills, flushing of the face, rash, itchy skin, feeling dizzy, wheezing, and trouble breathing. It's important to tell your doctor or nurse right away if you have any of these symptoms while getting this drug. You will be given medicines before each infusion to help lower this risk.

This drug can cause **heart damage** in some people. Before and during treatment with this drug, your doctor will test your heart function with an echocardiogram or a MUGA scan.

This drug can cause **diarrhea**, which might be severe, so it's very important to let your health care team know about any changes in your bowel habits as soon as they happen.

Other side effects of this drug can include stomach pain and feeling very tired.

Hyperlinks

1. www.cancer.org/cancer/types/basal-and-squamous-cell-skin-cancer.html

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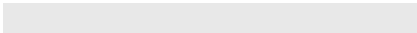

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Immunotherapy for Gallbladder Cancer

Immunotherapy is the use of medicines to help a person's immune system better recognize and destroy cancer cells. Many types of immunotherapy are being tested in [clinical trials](#)¹, and some are used to treat gallbladder cancer.



PD-1 inhibitors

Pembrolizumab (Keytruda) and nivolumab (Opdivo)

blocks CTLA-4, another protein on T cells that normally helps keep them in check.

It might be used with Nivolumab (Opdivo) to treat gallbladder tumors that have a high mutational burden (TMB-H).

This drug is given as an intravenous (IV) infusion, usually once every 3 weeks

Possible side effects of immune checkpoint inhibitors

Some of the more common side effects of these drugs can include fatigue, cough, nausea, skin rash, poor appetite, constipation, joint pain, and diarrhea.

Other, more serious side effects occur less often.

Infusion reactions: Some people might have an infusion reaction while getting these drugs. This is like an allergic reaction, and can include fever, chills, flushing of the face, rash, itchy skin, feeling dizzy, wheezing, and trouble breathing. It's important to tell your doctor or nurse right away if you have any of these symptoms while getting these drugs.

Autoimmune reactions: These drugs remove one of the safeguards on the body's immune system. Sometimes the immune system responds by attacking other parts of the body, which can cause serious or even life-threatening problems in the lungs, intestines, liver, hormone-making glands, kidneys, or other organs.

It's very important to report any new side effects to someone on your health care team as soon as possible. If serious side effects do occur, treatment may need to be stopped and you might be given high doses of corticosteroids to suppress your immune system.

More information about immunotherapy

To learn more about how drugs that work on the immune system are used to treat cancer, see [Cancer Immunotherapy²](#).

To learn about some of the side effects listed here and how to manage them, see [Managing Cancer-related Side Effects³](#).

Hyperlinks

1. www.cancer.org/cancer/managing-cancer/making-treatment-decisions/clinical-trials.html
2. www.cancer.org/cancer/managing-cancer/treatment-types/immunotherapy.html
3. www.cancer.org/cancer/managing-cancer/side-effects.html

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Palliative Therapy for Gallbladder Cancer

Palliative care is treatment used to help control or reduce symptoms caused by cancer. It's not meant to cure the cancer.

[When are palliative treatments used?](#)

When are palliative treatments used?

- A **catheter** is a thin, flexible tube that's put in through the skin of the abdomen (belly). One end of the tube is put into a bile duct and the other is outside the body. This allows the bile to drain into a bag. The bag can be emptied when needed. If you have a catheter, your doctor or nurse will teach you how to care for it.

These procedures can be done as part of a cholangiography procedure or, in some cases, during surgery. They're often done to help relieve or prevent symptoms in more advanced cancers, but they can also be done to help relieve jaundice before potentially curative surgery is done. This helps lower the risk of complications from the surgery.

The stent or catheter may need to be replaced every few months to help reduce the risk of infection and gallbladder inflammation. It will also need to be replaced if it becomes clogged.

Biliary bypass

In people who are healthy enough, a surgery called biliary bypass is another option to allow bile to drain from the liver and gallbladder. There are different biliary bypass operations. Deciding which one to use depends on where the blockage is. In these procedures, the surgeon creates a bypass around the tumor blocking the bile duct by connecting part of the bile duct before the blockage with a part of the duct that lies past the blockage, or with the intestine itself. For instance:

- A **choledochojejunostomy** joins the common bile duct to the jejunum (the second part of the small intestine).
- A **gastrojejunostomy** (also known as a **gastric bypass**) joins the stomach directly to the jejunum.
- A **hepaticojejunostomy** joins the duct that carries bile from the liver to the jejunum.

Sometimes these operations can be done using special long surgical tools put through several small holes made in the abdomen (belly). This is called **laparoscopic** or **keyhole surgery**.

A biliary bypass can often give longer-lasting relief than a stent, which might need to be cleaned out or replaced. Still, this can be a major operation, so it's important that you're healthy enough to withstand it and that you talk with your doctor about the possible benefits and risks before you have the surgery.

Treatment Options Based on the Extent of the Gallbladder Cancer

The extent of gallbladder cancer is an important factor in deciding on treatment options. Whenever possible, surgery is the main treatment. It's the best chance of curing the cancer. Because of this, doctors generally divide gallbladder cancers into 2 groups:

- **Resectable cancers** are those that doctors believe can be removed completely by surgery, based on the results of [imaging procedures and other tests](#)¹.
 - **Unresectable cancers** have spread too far or are in too difficult a place to be removed entirely by surgery.
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- [Resectable gallbladder cancers](#)
 - [Gallbladder cancers that might be resectable](#)
 - [Unresectable gallbladder cancers](#)
 - [Palliative care](#)
 - [Recurrent gallbladder cancer](#)

Resectable gallbladder cancers

Stage I and II cancers and some stage III cancers that have not spread far beyond the gallbladder may still be treatable with surgery. But it's not an option if the cancer has spread into major blood vessels. Other factors, such as whether a person is healthy enough for surgery, also affect whether surgery is a good option. For instance, if the cancer has only invaded the liver in one area and not too deeply, it may be possible to remove all of the cancer. On the other hand, if the cancer has spread to both sides of the liver, to the lining of the abdominal cavity, to organs far away from the gallbladder, or if it surrounds a major blood vessel, surgery is unlikely to remove it all.

How the cancer is first found can impact treatment options, too. For example, some cancers are found on imaging tests before surgery, while others are found only after the gallbladder has been taken out to treat another condition such as gallstones.

If gallbladder cancer is suspected or diagnosed, it's a good idea to be seen by a surgeon with experience treating this type of cancer. Gallbladder cancer is rare, and not all surgeons are skilled at the more extensive operations needed to treat it.

No matter what stage the cancer is, it's very important that you understand the goal of

- If the surgeon is experienced in treating gallbladder cancer and believes the cancer can be removed (is resectable), the operation may be changed to a more extensive operation called an **extended cholecystectomy**. (See [Surgery for Gallbladder Cancer](#) for details.)
- If the surgeon isn't experienced in treating gallbladder cancer or isn't sure if the cancer is resectable, the operation may be stopped at this point. Other tests such as CT or MRI scans will then be done to look for any remaining cancer in the body and find out whether it's resectable. If the cancer is thought to be resectable after these tests, an extended cholecystectomy may be done. This may be followed by adjuvant chemotherapy, with or without radiation, to try to keep the cancer from coming back.

If the scans show that the cancer can't be removed, treatment options will be like those used for unresectable cancers.

Cancer found on imaging tests or because of symptoms

Sometimes, gallbladder cancer is suspected because a person is having [symptoms](#)⁴ like jaundice. Imaging tests may then show areas suspicious for cancer in or near the gallbladder. Further imaging tests and staging laparoscopy may be done to look for any other suspicious areas. These tests can help determine if these areas are cancer and whether it can be removed (is resectable).

If the cancer is thought to be resectable and the person is healthy enough for surgery, an extended cholecystectomy (removing the gallbladder, part of the liver, nearby lymph nodes, and possibly the bile duct and other nearby organs) is the preferred treatment. If the person has jaundice before the surgery, a [stent or catheter](#) may be placed in the bile duct first to allow the bile to flow. This can help relieve symptoms over a few days and might make a person healthy enough for surgery. After the surgery, adjuvant chemotherapy, with or without radiation, may be advised to try to lower the chance that the cancer will come back.

If the imaging tests or a staging laparoscopy show that cancer is likely but that it can't be removed, a biopsy may be done to confirm the diagnosis. Treatment options will then be like those used for unresectable cancers.

Unresectable gallbladder cancers

If surgery isn't an option (for example, because of the size or location of the cancer or

be an option. But in most cases the recurrent cancer is unresectable and is treated as described above.

Recurrent gallbladder cancer is often very hard to treat, so people might want to consider taking part in a clinical trial of newer treatments.

Hyperlinks

www.cancer.org/rdai/diagnosis-stagaki/tesenthtmlks

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