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 Therapy for Gallbladder Cancer
- Chemotherapy for Gallbladder Cancer
- Targeted Therapy Drugs for Gallbladder Cancer

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.

- Clinical Trials

Considering complementary and alternative methods

You may hear about alternative or complementary methods to relieve symptoms or treat your cancer that your doctors haven't mentioned. These methods can include vitamins, herbs, and special diets, or other methods such as acupuncture or massage, to name a few.

Complementary methods are treatments that are used **along with**

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.

- If Cancer Treatments Stop Working

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** might be done.
- If the cancer is **unresectable**, meaning the cancer is too far advanced, has spread too far, or is in too difficult a place to be entirely removed by surgery, then **palliative surgery** might be done to help relieve or prevent symptoms.

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

Surgery is less likely to be done for unresectable cancers, but there are some instances where it might be helpful, this is called **palliative surgery.** The goal is not to treat the cancer, but to treat the problems it causes. An example is putting a plastic or expandable metal tube (called a **stent**) inside bile duct that's blocked by the tumor. This can keep the duct open and allow bile to flow through it.

You can find more details on palliative procedures at Palliative Therapy for Gallbladder

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)

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

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:

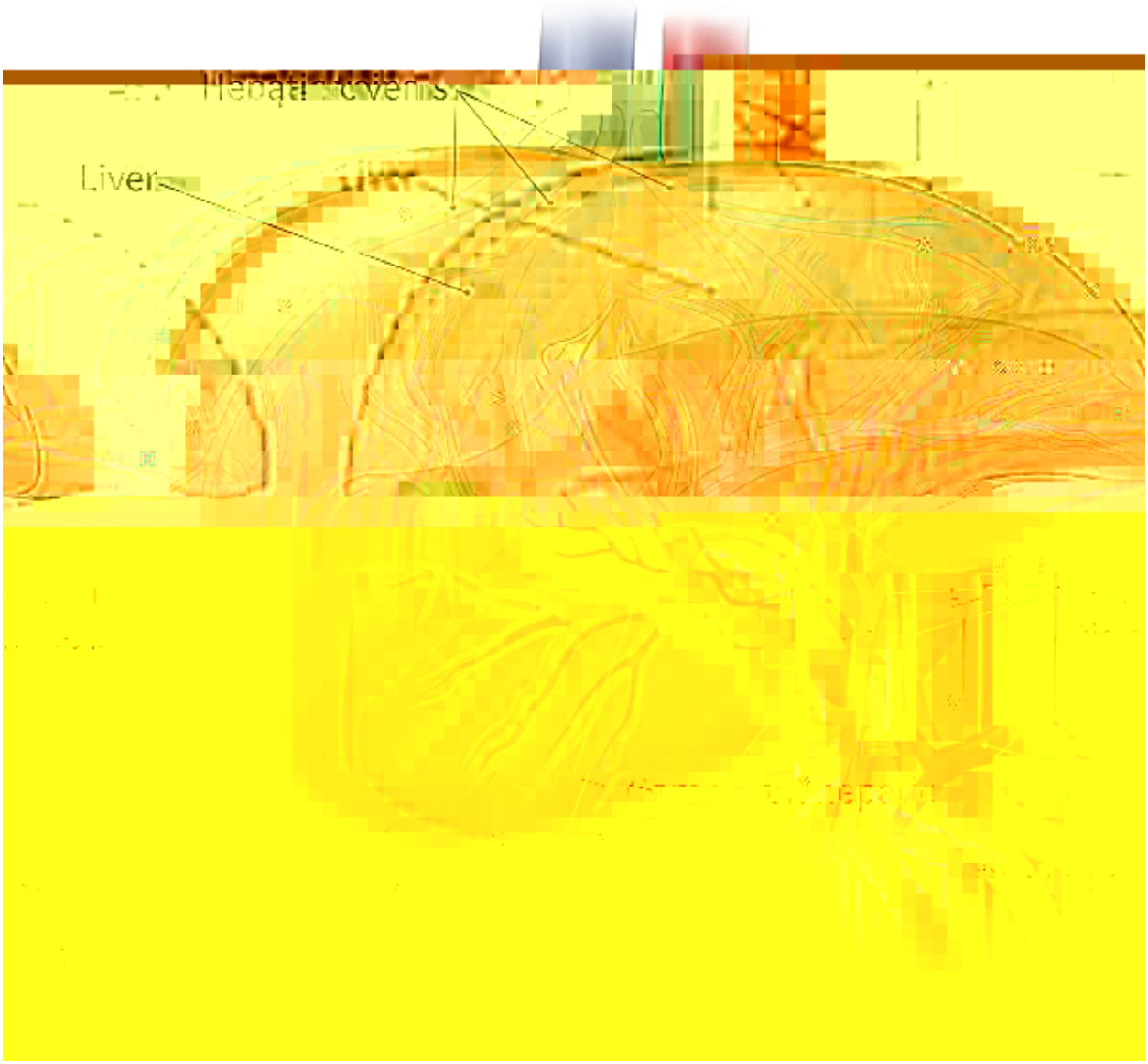
- Sunburn-like skin problems, like redness, blisters, and peeling in the area being treated
- Nausea and vomiting
- Diarrhea
- Fatigue (tiredness)
- Low blood cell counts

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,



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.

Possible side effects of FGFR2 inhibitors

The most common side effects of FGFR2 inhibitors include kidney problems, hair loss, diarrhea, constipation, nail problems, fatigue, taste changes, nausea, vomiting, dry mouth or mouth sores, loss of appetite, dry skin, dry eye or other eye problems, hand-foot syndrome, abdominal (belly) pain, and changes in blood mineral levels.

IDH1 inhibitor

In some people with gallbladdercancer, the cancer cells have a change (mutation) in the *IDH1* gene, which normally helps cells make the IDH1 protein. Mutations in this gene can lead to an abnormal IDH1 protein, which can stop cells from maturing the way they normally would.

Ivosidenib (Tibsovo) is an IDH1 inhibitor. It blocks the abnormal IDH1 protein, which seems to help the cancer cells mature into more normal cells. This drug can be used in people with advanced, previously treated gallbladdercancer, if the cancer cells are found to have an *IDH1* mutation. Your doctor can test your cancer cells to see if they have an *IDH1* mutation.

This drug is taken by mouth, once a day.

Possible side effects of IDH1 inhibitor

Common side effects can include fatigue, nausea, vomiting, abdominal (belly) pain or swelling, diarrhea, loss of appetite, cough, low red blood cell counts (anemia), rash, and changes in lab tests showing the drug is affecting the liver.

Less common but more serious side effects can include changes in heart rhythm, pneumonia, and jaundice (yellowing of the eyes and skin).

NTRK inhibitor

A very small number of gallbladder cancers have changes in one of the *NTRK* genes, called **NTRK gene fusions.** Cells with these gene changes make abnormal TRK proteins, which can lead to abnormal cell growth aNTRK1 /F1 14 Tf 0 0 0 rg /G1si0 0 0 rg /GS691 gs (

therapy.

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

Possible side effects of NTRK 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 inhibitor

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) or **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 serous side effects can include liver damage, lung damage, allergic reactions, changes in heart rhythm, bleeding easily, and problems with wound healing.

BRAF 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 of BRAF inhibitor

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

Less common but more serious side effects can include bleeding, heart rhythm problems, liver or kidney problems, lung problems, severe allergic reactions, severe skin or eye problems, increased blood sugar levels, and squamous cell skin cancer[1].

KRAS inhibitor

In some gallbladder cancers, the cancer cells have changes in the *KRAS* gene called a *KRAS G12C* mutation. This mutation 60 gs ( )Tj 0 g /F2 12 rnhibitor.headach389.problems, increase8

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

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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.

Immune checkpoint inhibitors

An important part of the immune system is its ability to keep itself from attacking the body's normal cells. To do this, it uses “checkpoint” proteins on immune cells, which act like switches that need to be turned on (or off) to start an immune response. Cancer cells sometimes use these checkpoints to avoid being attacked by the immune system.

Drugs that target these checkpoints (called **immune checkpoint inhibitors**) can be used to treat some gallbladder cancers.

PD-1 inhibitors

Pembrolizumab (Keytruda) and **nivolumab (Opdivo)** are drugs that target PD-1, a checkpoint protein on immune system cells called **T cells.** PD-1 normally helps keep T cells from attacking other cells in the body (including some cancer cells). By blocking PD-1, this drug boosts the immune response against cancer cells. This can shrink some tumors or slow their growth.

These drugs can be used in different ways to treat gallbladder cancer:

- **Pembrolizumab (Keytruda) with chemotherapy:** This drug can be given along with the chemo drugs gemcitabine and cisplatin to treat gallbladder cancer that can’t be removed by surgery or that has spread to other parts of the body.

treat gallbladder cancer that can't be removed by surgery or that has spread to other parts of the body.

This drug is given as an intravenous (IV) infusion, typically every 2 to 4 weeks.

CTLA-4 inhibitor

Ipilimumab (Yervoy) is another checkpoint inhibitor, but it has a different target. It 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

To learn about some of the side effects listed here and how to manage them, see Managing Cancer-related Side Effects[3].

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?

If gallbladder cancer has spread too far to be removed by surgery, doctors may focus on palliative treatments. For instance, pain medicines[1] and drugs to control nausea or itching might be used to help you feel better. Radiation and chemotherapy can also be used to help relieve problems caused by the tumor(s). Sometimes, surgery or other treatments are used to help you feel better or to help prevent problems the cancer might cause. Because gallbladder cancers tend to grow and spread quickly, doctors try to use palliative therapies that are less likely to have unpleasant short-term side effects, whenever possible. Your cancer care team will talk with you about the pros and cons of all the treatments that might help you.

Here are some examples of procedures that might be used as part of palliative care for gallbladder cancer:

Biliary stent or biliary catheter

If cancer is blocking a duct that carries bile from the gallbladder or liver to the small intestine, it can lead to jaundice (yellowing of the skin and eyes) and other problems,

like infection and liver failure. A small tube or a catheter can be put into the bile duct or the gallbladder to help the bile drain out.

- A **stent** is a small metal or plastic tube that's put through the blockage in the duct. It keeps the duct open to allow the bile to drain into the small intestine.
- 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.

More information about palliative care

To learn more about how palliative care can be used to help control or reduce symptoms caused by cancer, see Palliative Care[2].

To learn about some of the side effects of cancer or treatment and how to manage them, see Managing Cancer-related Side Effects[3].

Hyperlinks

1. www.cancer.org/cancer/managing-cancer/side-effects/pain.html
2. www.cancer.org/cancer/managing-cancer/palliative-care.html
3. www.cancer.org/cancer/managing-cancer/side-effects.html

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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.

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 treatment before it starts – whether it’s to try to cure the cancer or to help relieve symptoms – as well as the likelihood of the benefits and risks. This can help you make good decisions when looking at your treatment options.

Gallbladder cancers that might be resectable

These are earlier stage cancers that doctors believe might be removed completely by surgery. Treatment of these cancers depends in part on how they're first found.

Cancer found after surgery for another gallbladder problem

Some gallbladder cancers are found when the gallbladder is removed to treat gallstones

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 because of a person's general health), the focus of treatment is usually on trying to control the cancer. This can help with symptoms and may help people live longer.

Many people with unresectable gallbladder respond well to a combination of immunotherapy and chemotherapy as an initial treatment. Immunotherapy can also be

Cancer is called **recurrent** when it comes back after treatment. Recurrence can be local (in or near the same place it started) or distant (it comes back in organs, like the lungs or bone). If the cancer comes back, further treatment depends on where the cancer recurs, the kind of treatment used in the past, and the patient's overall health.

Rarely, the cancer may recur in a small area near where it started, in which case surgery to try to remove it (perhaps followed by chemo and/or radiation therapy) might 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

1. www.cancer.org/cancer/diagnosis-staging/tests.html
2. www.cancer.org/cancer/types/gallbladder-cancer/detection-diagnosis-staging/diagnosis.html
3. www.cancer.org/cancer/survivorship/long-term-health-concerns/recurrence.html
4. www.cancer.org/cancer/types/gallbladder-cancer/detection-diagnosis-staging/signs-and-symptoms.html
5. www.cancer.org/cancer/managing-cancer/making-treatment-decisions/clinical-trials.html

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