Treating Bile Duct Cancer

Making treatment decisions

After bile duct cancer is found and staged, your cancer care team will discuss your treatment options with you. It is important for you to take time and think about your choices. In choosing a treatment plan, there are some factors to consider:

- The location and extent of the cancer
- Whether the cancer is resectable (removable by surgery)
- The likely side effects of treatment
- Your overall health
- The chances of curing the disease, extending life, or relieving symptoms

The main types of treatment for bile duct cancer include:

- Surgery
- Radiation therapy
- Chemotherapy
- Palliative therapy

Based on your treatment options, you might have different types of doctors on your cancer care team. These might 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
- A hepatologist: a doctor who treats disease of the liver and bile ducts

Many other specialists might be part of your treatment team as well, including physician assistants (PAs), nurse practitioners (NPs), nurses, psychologists, social workers,
rehabilitation specialists, and other health professionals. See Health Professionals Associated With Cancer Care for more on this.

It’s important to discuss all of your treatment options, including their goals and possible side effects, with your doctors to help make the decision that best fits your needs. It’s also very important to ask questions if there is anything you’re not sure about. You can find some good questions to ask in the section “What should you ask your doctor about bile duct cancer?” If time allows, it is often a good idea to seek a second opinion, particularly for an uncommon cancer like bile duct cancer. A second opinion can provide more information and help you feel more confident about your chosen treatment plan.

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. Still, they are not right for everyone.

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. You can also call our clinical trials matching service at 1-800-303-5691 for a list of studies that meet your medical needs, or see “Clinical Trials” to learn more.

Considering complementary and alternative methods

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

Complementary methods refer to treatments that are used along with your regular medical care. Alternative treatments are used instead of a doctor’s medical treatment. Although some of these methods might be helpful in relieving symptoms or helping you feel better, many have not been proven to work. Some might even be dangerous.

Be sure to talk to your cancer care team about any method you are thinking about using. They can help you learn what is known (or not known) about the method, which can help you make an informed decision. See Complementary and Alternative Medicine to learn more.
Help getting through cancer treatment

Your cancer care team will be your first source of information and support, but there are other resources for help when you need it. Hospital- or clinic-based support services are an important part of your care. These might include nursing or social work services, financial aid, nutritional advice, rehab, or spiritual help.

The American Cancer Society also has programs and services – including rides to treatment, lodging, support groups, and more – to help you get through treatment. Call our National Cancer Information Center at 1-800-227-2345 and speak with one of our trained specialists on call 24 hours a day, every day.

The next few sections describe the different types of treatment for bile duct cancer. This is followed by a discussion of the most common treatments for bile duct cancer based on whether it is resectable.

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 him or her questions about your treatment options.

Surgery for Bile Duct Cancer

There are 2 general types of surgery for bile duct cancer:

- Potentially curative surgery
- Palliative surgery

Potentially curative surgery is used when imaging tests or the results of earlier surgeries show there's a good chance that the surgeon can remove all of the cancer. Doctors use the term resectable to describe cancers they believe can be removed completely (by potentially curative surgery) and unresectable to describe those they think have spread too far or are in too difficult a place to be entirely removed by surgery. Unfortunately, only a small portion of bile duct cancers are resectable when they are first found.

If potentially curative surgery is being considered, you may want to get a second opinion or even be referred to a large cancer center. Nearly all doctors agree that surgery offers the only realistic chance for curing people with bile duct cancer. But there are
differences of opinion about how advanced a bile duct cancer can be and still be treatable with surgery. The surgery needed for bile duct cancer is often complex and requires an experienced surgeon. These operations are most often done at major cancer centers.

**Palliative surgery** is done to relieve symptoms or treat (or even prevent) complications, such as blockage of the bile ducts. This type of surgery is done when the tumor is too widespread to be removed completely. Palliative surgery is not expected to cure the cancer, but it can sometimes help a person feel better and sometimes can even help them live longer. Palliative surgery is described in more detail in the section “Palliative therapy for bile duct cancer.”

Surgery to remove bile duct cancer can have serious side effects and, depending on how extensive it is, may require several 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 require a lot of recovery time. It’s very important to understand the goal of any surgery for bile duct cancer, what the possible benefits and risks are, and how the surgery is likely to affect your quality of life.

**Laparoscopy**

If your surgical team is planning curative surgery, they first may do a laparoscopy (a type of minor surgery) to look for any spread of the cancer that could make curative surgery impossible. This procedure is described in the section “How is bile duct cancer diagnosed?” During the laparoscopy, the surgeon can look for areas of cancer that were not detected with imaging tests. If the cancer is still resectable, laparoscopy can also help plan the operation to remove it.

**Surgery for resectable cancers**

For resectable cancers, the type of operation depends on the location of the cancer.

**Intrahepatic bile duct cancer:** These cancers have started in bile ducts within the liver. To treat these cancers, the surgeon cuts out the part of the liver containing the cancer. Removing part of the liver is called a *partial hepatectomy*. Sometimes this means that a whole lobe (right or left part) of the liver must be removed. This is called *hepatic lobectomy*. It is a complicated operation and requires an experienced team of surgeons and assistants. If the amount of liver removed is not too great, the liver will still function normally because it has some ability to grow back.

**Perihilar bile duct cancer:** These cancers begin where the branches of the bile duct
first leave the liver. Surgery for these cancers requires great skill, as the operation is quite extensive. Usually part of the liver is removed, along with the bile duct, gallbladder, nearby lymph nodes, and sometimes part of the pancreas and small intestine. Then the surgeon connects the remaining ducts to the small intestine. This is a complex operation that can even have life threatening complications for some patients.

**Distal bile duct cancer:** These cancers are further down the bile duct near the pancreas and small intestine. Along with the bile duct and nearby lymph nodes, in most cases the surgeon must remove part of the pancreas and small intestine, an operation called a *Whipple procedure*. Like the other operations, this is a complex procedure that requires an experienced surgical team.

**Possible risks and side effects:** The risks and side effects of surgery depend on the extent of the operation and a person’s general health. All surgery carries some risk, including the possibility of bleeding, blood clots, infections, complications from anesthesia, pneumonia, and even death in rare cases.

People will have some pain from the incision for some time after the operation, but this can usually be controlled with medicines.

Surgery for bile duct cancer is a major operation that might mean removing parts of several organs. This can significantly affect a person’s recovery and health after the surgery. Serious problems soon after surgery can include bile leakage into the abdomen, infections, and liver failure. Because most of the organs removed are involved in digestion, eating and nutrition problems can be side effects of surgery for this cancer.

**Surgery for unresectable cancers**

Surgery is less likely to be done for unresectable cancers, but there are some instances where it might be helpful.

**Liver transplant:** For some people with unresectable intrahepatic or perihilar bile duct cancers, removing the liver and bile ducts and then transplanting a donor liver may be an option. In some cases it might even cure the cancer.

But even for people who are eligible for a transplant, getting a new liver may not be easy. Not many centers accept patients with bile duct cancer into their transplant programs. Also, few livers are available for patients with cancer because they are generally used for more curable diseases. People needing a transplant must wait until a
liver is available, which can take too long for some people with bile duct cancer.

One option might be having a living donor (often a close relative) give a part of their liver for transplant. This can be successful, but it carries risks for the donor. Another option might be to treat the cancer first with chemotherapy and radiation. This is followed by a transplant when a liver becomes available. Clinical trial results using this approach have been promising.

Like other surgeries for bile duct cancer, a liver transplant is a major operation with potential risks (bleeding, infection, complications from anesthesia, etc.). But there are also some additional risks after this surgery.

People who get a liver transplant have to be given drugs to help suppress their immune system to prevent it from rejecting the new organ. These drugs have their own risks and side effects, especially the risk of getting serious infections. Some of the drugs used to prevent rejection can also cause high blood pressure, high cholesterol, and diabetes, can weaken the bones and kidneys, and can lead to the development of another cancer. After a liver transplant, regular blood tests are important to check for signs of rejection. Sometimes liver biopsies are also taken to see if rejection is occurring and if the anti-rejection medicines need to be changed.

### Palliative surgery

Palliative surgery: In some cases a doctor may think that a cancer is resectable based on the information available (imaging tests, laparoscopy, etc.), but once surgery is started it becomes clear that the cancer is too advanced to be removed completely. In these cases, the surgeon might still try to prevent or relieve symptoms using a different approach.

- **Biliary bypass:** One option at this point is to do a biliary bypass to allow the bile to flow into the intestines to reduce symptoms such as jaundice or itching. Different types of biliary bypass operations may be done, based on the location of the blockage. 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. Often, the gallbladder is used to provide some of the bypass.

- **Stent placement:** If a bypass can’t be done, the surgeon may place a plastic or expandable metal tube (called a stent) inside the bile duct to keep it open.

These palliative procedures are discussed further in the section “Palliative therapy for bile duct cancer.”
Radiation Therapy for Bile Duct Cancer

Radiation therapy uses high-energy rays or particles to destroy cancer cells. Radiation can be used in different settings to treat bile duct cancer:

- **After surgery for resectable cancers:** This is known as *adjuvant therapy*. It is meant to kill any tiny deposits of cancer cells that remain after surgery (but are too small to see). Some doctors believe adjuvant radiation therapy is helpful, but more research is needed to confirm this.
- **Before surgery for borderline resectable cancers:** Some doctors may use radiation therapy before surgery for certain cancers that are thought to be resectable. This is done to try to shrink the cancer and make the operation easier and is known as *neoadjuvant therapy*. It’s not clear how helpful this is.
- **As part of the main therapy for some advanced cancers:** Radiation therapy can also be used as a main therapy for some patients whose cancer has not spread widely throughout the body, but is not resectable. While treatment in this case does not offer a cure, it may help patients live longer.
- **As palliative therapy:** Radiation therapy is often used to palliate (relieve) symptoms when a cancer is too advanced to be cured. It can help relieve pain or other symptoms by shrinking tumors that block passageways for blood or bile, or press on nerves.

*Chemotherapy* (chemo) is sometimes given along with the radiation therapy to help it work better. This is called *chemoradiation*. Most often, the chemo drugs used are 5-fluorouracil (5-FU) or capecitabine (Xeloda®). The main drawback of this approach is that the side effects tend to be worse than giving radiation alone.

The 2 main types of radiation therapy are external beam radiation therapy (EBRT) and brachytherapy. EBRT is the most common form of radiation for bile duct cancer.
External beam radiation therapy (EBRT)

This type of radiation therapy uses x-rays from a machine outside 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 setup time – getting you into place for treatment – usually takes longer. Most often, radiation treatments are given 5 days a week for several weeks.

Newer radiation techniques now let doctors more accurately treat bile duct cancers while reducing the radiation exposure to nearby healthy tissues. This may increase the success rate and help reduce side effects.

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 therapy. 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 several 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 areas. IMRT is available in many major hospitals and cancer centers.

Stereotactic body radiotherapy (SBRT) uses the techniques of 3D-CRT and IMRT, but gives the radiation over fewer sessions. A course of SBRT may take less than a week, while a course of radiation using these other techniques often takes place over 3 to 6 weeks.

EBRT side effects

Side effects of EBRT depend on the area of the body being treated. Some common side effects include:

- Skin changes, ranging from redness to blistering and peeling (in the area being treated)
- Nausea and vomiting
Diarrhea  
Fatigue (tiredness)  
Hair loss (on the skin in the area being treated)  
Low blood cell counts

Nausea, vomiting, and diarrhea are more common if the abdomen (belly) is being treated.

Side effects from radiation often start a week or 2 into treatment, and improve once treatment is over.

**Brachytherapy (internal radiation therapy)**

This type of treatment uses small pellets of radioactive material placed next to or directly into the cancer. The radiation travels a very short distance, so it affects the cancer without causing much harm to nearby healthy body tissues. For bile duct cancer, brachytherapy is sometimes done by placing the pellets in a tube, which is inserted into the bile duct for a short time.

For more general information about radiation therapy, see the [Radiation Therapy](#) section on our website.

**Chemotherapy for Bile Duct Cancer**

Chemotherapy (chemo) is treatment with anti-cancer drugs that are usually given into a vein or taken by mouth. These drugs enter the bloodstream and reach all areas of the body, making this treatment useful for some cancers that have spread to organs beyond the bile duct. Because the drugs reach all the areas of the body, this is known as a **systemic** treatment. Chemo can help some people with bile duct cancer, but so far its effects against this type of cancer have been found to be limited.
For resectable bile duct cancers (cancers that can be removed completely), chemo may be used after surgery (often along with radiation therapy) to try to lower the risk that the cancer will return. This is known as **adjuvant chemo**. Some doctors may use it before surgery for borderline resectable cancers to try to improve the odds that surgery will be successful. This is called **neoadjuvant treatment**.

Chemo can also be used (sometimes with radiation therapy) for more advanced cancers. Chemo does not cure these cancers, but it might shrink or slow the growth of tumors for a time. This can help relieve symptoms from the cancer, and may help people live longer.

Doctors give chemo in cycles, with each period of treatment followed by a rest period to give the body time to recover. Chemo cycles generally last about 3 to 4 weeks. Chemo is often not recommended for patients in poor health, but advanced age by itself is not a barrier to getting chemotherapy.

**Hepatic artery infusion (HAI):** Because giving chemo into a vein is not always helpful for bile duct cancer, doctors have tried giving the drugs directly into the main artery going into the liver, called the **hepatic artery**. Since the hepatic artery also supplies most bile duct tumors, 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. HAI may help some people whose cancer was not removable by surgery live longer, but more research is needed. This technique may not be useful for some people because it often requires surgery to insert a catheter into the hepatic artery, an operation that many bile duct cancer patients might not tolerate well.

**Drugs used to treat bile duct cancer**

Several drugs can be used to treat bile duct cancer. In some cases, 2 or more of these drugs may be combined to try to make them more effective. The drugs used most often to treat bile duct cancer include:

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

**Possible side effects of chemotherapy**
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 also be affected by chemo, which can lead to side effects.

The side effects of chemo depend on the type and dose of drugs given and the length of time they are taken. Side effects can include:

- Hair loss
- Mouth sores
- Loss of appetite
- Nausea and vomiting
- Diarrhea
- Nerve damage (neuropathy), which can lead to trouble swallowing or 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)

These side effects are usually short-term and go away after treatment is finished. 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, and let them know when you do have side effects so they can be managed effectively.

To learn more about chemo, see the Chemotherapy section of our website.

- References
See all references for Bile Duct Cancer

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Palliative Therapy for Bile Duct Cancer
**Palliative therapy** is treatment given to help control or reduce symptoms caused by advanced cancer. It is not meant to cure the cancer. If the cancer has spread too far to be removed by surgery, doctors may focus on palliative operations, radiation, or other treatments to help make you feel better or to help prevent possible complications from the cancer. Because these cancers tend to advance quickly, doctors try to use palliative therapies that are less likely to have unpleasant short-term side effects, when possible.

**Biliary stent or biliary catheter**

If cancer is blocking a bile duct, it can lead to jaundice and other problems. The doctor may insert a small tube (either a stent or catheter) into the duct to help keep it open. This may be done as part of a cholangiography procedure such as ERCP or PTC (see the section “How is bile duct cancer diagnosed?”) or, in some cases, during surgery.

- **A stent** is a small metal or plastic tube that keeps the duct open to allow the bile to drain into the small intestine.
- **A catheter** is a thin, flexible tube. One end of the tube is placed into a bile duct to allow bile to drain into a bag outside the body through a small hole in the skin of the abdomen. 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 are often done to help prevent or relieve symptoms from 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 if it becomes clogged and to reduce the risk of infection and gallbladder inflammation.

**Biliary bypass**

Another option to allow bile to reach the small intestine is to use a surgery called biliary bypass. There are several different biliary bypass operations, and the decision on which one to use is based on the location of the blockage. 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.

As mentioned in the section “Surgery for bile duct cancer”, this option is more likely to be used if a patient is already having surgery to try to cure the cancer, but it turns out to be unresectable. While a bypass is clearly more invasive than placing a stent or catheter, it has some advantages in that the effects may last longer and infection is less
likely to be a problem.

**Palliative radiation therapy**

*Radiation therapy* may be used to help relieve pain and other symptoms by killing some cancer cells that are causing blockage of the bile duct or are pressing on nerves.

**Tumor ablation (radiofrequency ablation or cryosurgery)**

Tumors in the liver that can’t be resected can sometimes be destroyed (ablated) by placing a long metal probe through the skin and into the tumor. The tip of the probe is then heated (in radiofrequency ablation) or frozen (in cryotherapy) to kill the cancer cells.

**Photodynamic therapy (PDT)**

For this technique, a light-activated drug is injected into a vein. The drug is more likely to collect in cancer cells than in normal cells. A few days later, an endoscope (a long, flexible tube that can be used to look inside the body) is passed down the throat, through the stomach and intestine, and into the bile ducts. A special red light on the end of the endoscope is aimed at the tumor, causing the cells to die. The combination of PDT and stenting can be helpful for patients with bile duct cancer whose tumors aren’t resectable.

This drug can also collect in normal cells in the body, making a person very sensitive to sunlight or strong indoor lights. You will likely need to stay out of any strong light for several weeks after the injection.

**Alcohol injection**

To relieve pain, doctors may deaden the nerves that convey sensations of pain from the bile duct and intestinal area to the brain by injecting these nerves with alcohol. This can be done during surgery or by guiding a long, hollow needle into place with the help of a CT scan.

**Pain medicines**

Doctors can prescribe strong pain-relieving drugs if needed. Some people with cancer may be worried about taking opioid drugs (such as morphine) for fear of being sleepy all the time or becoming addicted to them. But many people get very effective pain relief
from these medicines without serious side effects. It’s very important to let your cancer care team know if you are having pain so that it can be treated effectively.

Pain medicines work best when they are taken on a regular schedule. They do not work as well if they are only used when the pain becomes severe. Several long-acting forms of morphine and other opioids are in pill form and only need be taken once or twice a day. There is even a long-acting patch that only needs to be applied every few days.

Common side effects of these drugs are nausea and feeling sleepy, which often get better over time. Constipation is a common side effect that does not get better on its own, so it needs to be treated. Most people on these drugs need to take laxatives daily.

To learn more about the options for managing cancer pain, see the Cancer Pain section of our website.

- References
See all references for Bile Duct Cancer

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**Treatment of Bile Duct Cancer Based on the Situation**

The extent of a bile duct cancer is an important factor in determining treatment options. Whenever possible, surgery is the main treatment for bile duct cancers, as it offers the only realistic chance for a cure. Because of this, doctors generally divide bile duct cancers into 2 groups:

- **Resectable cancers** are those that doctors believe can be removed completely by surgery, based on the results of imaging tests and other tests.
- **Unresectable cancers** have spread too far or are in too difficult a place to be removed entirely by surgery.

Unfortunately, most bile duct cancers have spread too far to be resectable by the time they are found.
Resectable bile duct cancers

Most stage 0, I, and II cancers and possibly some stage III cancers in the TNM staging system are potentially resectable. But this also depends on other factors, such as the location of the cancer and if a person is healthy enough for major surgery.

Surgery to remove the cancer completely is the preferred treatment if it is possible. If surgery is being considered, a staging laparoscopy may be done first to look inside the abdomen for any spread of the cancer that could make it unresectable. This procedure is described in the section “How is bile duct cancer diagnosed?”

The type of operation done to remove the cancer depends on the location and extent of the cancer. (See the “Surgery for bile duct cancer” section for more details.) If the patient 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 help make a person healthy enough for the operation.

Adjuvant radiation therapy and/or chemotherapy (chemo) may be given after surgery to try to lower the risk that the cancer will come back, but doctors aren’t sure how helpful this is. Adjuvant therapy is more likely to be used if there’s a higher chance that the cancer wasn’t removed completely (based on looking at the tissue removed at surgery in the lab). If it is clear that some cancer was left behind at the primary site, a second surgery may also be an option in some cases.

Sometimes it isn’t clear from imaging or other tests whether the cancer can be removed completely. These cancers are often called borderline resectable tumors. Some doctors may recommend neoadjuvant treatment with radiation and/or chemo before surgery to try to shrink the tumor. Then, if the cancer shrinks, surgery can be done to try to remove all of the cancer. Although this approach is helpful with some other types of cancer, there is no strong evidence that this helps patients with bile duct cancer live longer.

Unresectable bile duct cancers

This includes most stage III and IV cancers, as well as some earlier stage cancers if a person isn’t healthy enough for surgery. Most bile duct cancers are unresectable.

As noted above, in uncommon cases where it isn’t clear if a cancer is resectable, chemotherapy and/or radiation therapy may be used first to try to shrink the cancer and make it resectable. Surgery could then be done to try to remove the cancer completely.

In some cases, the doctor might think that a cancer is resectable, but once the
operation starts it becomes clear that it can’t be removed completely. For example, the cancer may turn out to have spread farther than was visible on imaging tests before surgery. At this point it would not usually be helpful to remove only part of the cancer, and surgery could still cause major side effects, so this part of the operation is stopped. The surgeon may instead do a biliary bypass at this time to relieve any bile duct blockage or to try to prevent it from becoming a problem in the future. Placing stents in the bile ducts to keep them open may also be an option during surgery.

For some unresectable intrahepatic or perihilar bile duct cancers, a liver transplant (after complete removal of the liver and bile duct) may be an option. Chemo and radiation may be given first. Although, it is often hard to find a compatible liver donor, a liver transplant can provide a chance for a cure.

For most bile duct cancers, it’s clear from imaging tests and/or laparoscopy that they are not resectable. For these cancers, treatment is aimed at trying to control the growth of the cancer for as long as possible and to relieve any symptoms it is causing.

Radiation therapy and/or chemo may shrink or slow the growth of the cancer for a time. When chemo is given alone (without radiation) the drugs cisplatin and gemcitabine (Gemzar) are often used. When chemo is given with radiation, the drug 5-FU is most often used. For bile duct cancers within the liver, ablation using extreme heat (radiofrequency ablation) or cold (cryotherapy) may help control the tumors. Unfortunately, almost all of these cancers begin to grow again eventually. For people looking to continue to try to treat the cancer, taking part in clinical trials of newer treatments may be an option.

Much of the focus of treating people with unresectable cancers is on relieving symptoms from the cancer. Two of the most important problems are bile duct blockage (which can lead to jaundice, itching, and other symptoms) and pain.

Bile duct blockage can be treated (and in some cases prevented) with surgery or other procedures. In most people with unresectable cancer, it’s probably best to avoid a major operation if it can be helped. A biliary bypass may be a good option if a patient is already having surgery and the cancer turns out to be unresectable. In other cases, a stent or catheter may be placed in the bile duct to keep it open or allow it to drain. This can be done by placing a needle through the skin over the liver (percutaneously) or using an endoscope (an instrument used to look inside the body) passed down the mouth. It can also be done surgically in some cases.

Other options to help keep the bile duct open include brachytherapy (placing a tube with radioactive pellets inside the bile duct for a short time) and photodynamic therapy (injecting a light-sensitive drug into the blood and then using an endoscope with a
Advanced bile duct cancer may be painful, so it is important to tell your doctor about any pain right away so it can be managed effectively. Radiation therapy, alcohol injection, and ablation of tumors within the liver can be used to relieve pain in some cases. Doctors often prescribe opioid pain medicines (like morphine) as needed. Some people may worry about taking opioid drugs for fear of becoming addicted to them. Yet some of the most effective pain medicines are opioids, and studies show that most people are not at risk of becoming addicted to drugs prescribed for them to stop pain for medical conditions.

Maintaining your quality of life is an important goal. Please don’t hesitate to discuss pain, other symptoms, or any quality-of-life concerns with your cancer care team.

**Recurrent bile duct cancer**

Cancer is called *recurrent* when it come backs after treatment. *Recurrence* can be local (in or near the same place it started) or distant (spread to organs such as the lungs). If the cancer comes back, further treatment depends on where the cancer recurs, what kind of treatment was previously used, and on the patient’s health.

In most cases if the cancer comes back after initial treatment, it will not be resectable. Treatment will be aimed at controlling the cancer growth and relieving symptoms, as described above for unresectable cancers. In rare cases, if the cancer recurs in the area where it started, surgery to try to remove the cancer (and possibly adjuvant therapy) may be an option. Because most of these cancers are not curable, people might want to consider taking part in a [clinical trial](https://www.clinicaltrials.gov) of newer treatments.

- References

*See all references for Bile Duct Cancer*

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