Gallbladder Cancer - Diagnosis [1]

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ON THIS PAGE: You will find a list of the common tests, procedures, and scans that doctors can use to find out what?s wrong and identify the cause of the problem. To see other pages, use the menu on the side of your screen.

Doctors use many tests to diagnose cancer and find out if it has spread to another part of the body, called metastasis. Some tests may also determine which treatments may be the most effective. For most types of cancer, a biopsy is the only way to make a definitive diagnosis of cancer. If a biopsy is not possible, the doctor may suggest other tests that will help make a diagnosis. Imaging tests may be used to find out whether the cancer has spread. This list describes options for diagnosing this type of cancer, and not all tests listed will be used for every person. Your doctor may consider these factors when choosing a diagnostic test:

- Age and medical condition
- Type of cancer suspected
- Signs and symptoms
- Previous test results

In addition to a physical examination, the following tests may be used to diagnose gallbladder cancer:

Biopsy [3]**.** A biopsy is the removal of a small amount of tissue for examination under a microscope. Other tests can suggest that cancer is present, but only a biopsy can make a definite diagnosis. The sample removed during the biopsy is analyzed by a pathologist. A pathologist is a doctor who specializes in interpreting laboratory tests and evaluating cells, tissues, and organs to diagnose disease.

The sample of tissue can be taken one of several ways: during a surgery; with a minimally invasive surgical technique known as laparoscopy (see below); or with a fine needle or thick needle aspiration (a core biopsy), using a computed tomography (CT or CAT) scan or ultrasound to guide the needle placement. In some cases, a biopsy is done by passing an endoscope [4] (a thin, lighted, flexible tube) through the mouth, past the stomach, and into the first part of the intestine. A tool can be passed from the endoscope through the intestinal wall to remove a sample of tissue.

Endoscopic retrograde cholangiopancreatography (ERCP) [4]. This test allows the doctor to see inside the body. The person is lightly sedated, and the doctor inserts an endoscope through the mouth, down the esophagus, and into the stomach and small bowel. A smaller tube or catheter is passed through the endoscope and into the bile ducts. Dye is injected into the ducts, and the doctor takes x-rays that can show whether a tumor is present in the area around the bile ducts. A plastic or metal stent can be placed across an obstructed bile duct during ERCP to help relieve jaundice if it is present. An experienced gastroenterologist should perform this procedure. A gastroenterologist is a doctor who specializes in the function and disorders of the gastrointestinal tract. This procedure is used more commonly to find cancer of the bile duct [5] than to find gallbladder cancer, but it may also be used if the gallbladder cancer spreads and blocks the bile ducts.

X-ray. An x-ray is a way to create a picture of the structures inside of the body using a small amount of radiation. The patient may be asked to swallow barium, which coats the digestive tract, to enhance the image on the x-ray. This is called a barium swallow.

Percutaneous cholangiography. In this procedure, a thin needle is inserted through the skin and into the gallbladder area. A dye is injected through the needle so that a clear image will show up on x-rays. By looking at the x-rays, the doctor may be able to see whether there is a tumor in the gallbladder. More commonly, a cholangiography provides images of the bile ducts, and it may not show a tumor in the gallbladder. However, the procedure is excellent in detecting the site of a blocked bile duct.

Laparoscopy [4]. Laparoscopy uses an endoscope to look at the gallbladder and other internal organs. The tube is inserted through a small incision in the abdomen.

Blood tests. The doctor may take samples of blood to check for abnormal levels of bilirubin and other substances. Bilirubin is a chemical that may reach high levels in people with gallbladder cancer due to blockage of the common bile duct by a tumor.

Computed tomography (CT or CAT) scan [6]**.** A CT scan creates a three-dimensional picture of the inside of the body with an x-ray machine. A computer then combines these images into a detailed, cross-sectional view that shows any abnormalities or tumors. A CT scan can also be used to measure the tumor?s size. Sometimes, a special dye called a contrast medium is given before the scan to provide better detail on the image. This dye can be injected into a patient?s vein or given as a pill to swallow.

Magnetic resonance imaging (MRI) [7]**.** An MRI uses magnetic fields, not x-rays, to produce detailed images of the body and can be used to find out whether the cancer has spread outside the gallbladder. MRI can also be used to measure the tumor?s size. A special dye called a contrast medium is given before the scan to create a clearer picture. This dye can be injected into a patient?s vein or given as a pill to swallow.

Ultrasound [8]**.** An ultrasound uses sound waves to create a picture of the internal organs. Tumors generate different echoes of the sound waves than normal tissue; thus, when the waves are bounced back to a computer, creating images, the doctor can locate a mass inside the body.

Positron emission tomography (PET) scan [9]**.** A PET scan is a way to create pictures of organs and tissues inside the body. A small amount of a radioactive sugar substance is injected into the patient?s body. This sugar substance is taken up by cells that use the most energy. Because cancer tends to use energy actively, it absorbs more of the radioactive substance. A scanner then detects this substance to produce images of the inside of the body.

After diagnostic tests are done, your doctor will review all of the results with you. If the diagnosis is cancer, these results also help the doctor describe the cancer; this is called staging.

The next section helps explain the different stages for this type of cancer. Use the menu on the side of your screen to select Stages, or you can select another section, to continue reading this guide.

Links:
[1] http://www.cancer.net/cancer-types/gallbladder-cancer/diagnosis
[2] http://www.cancer.net/about-us
[3] http://www.cancer.net/node/24406
[4] http://www.cancer.net/node/24511
[5] http://www.cancer.net/node/31332
[6] http://www.cancer.net/node/24486
[7] http://www.cancer.net/node/24578
[8] http://www.cancer.net/node/24714
[9] http://www.cancer.net/node/24648