

## Gastric Cancer

### About the Stomach

The stomach is an organ in the digestive system that helps digest food. It is located between the esophagus and the small intestine. The walls of the stomach are made of muscles that churn and break down food into small pieces.

### What is gastric cancer?

Cancer develops when abnormal cells grow and form a mass. This mass is called a tumor. Tumors can be either benign (non cancerous) or malignant (cancerous).

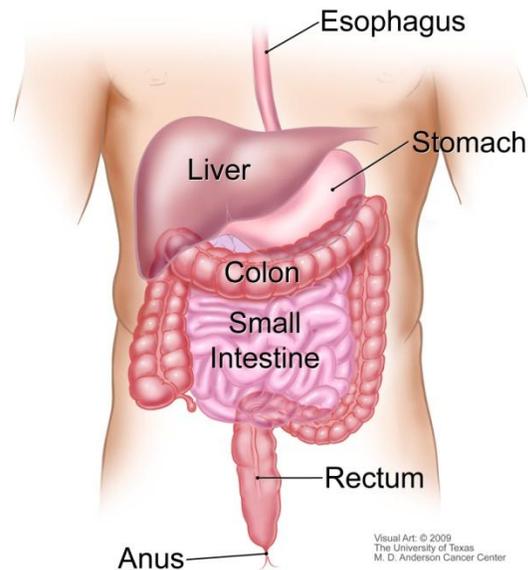
Gastric cancer is a disease in which cancer cells form in the lining of the stomach. The wall of the stomach is made up of several layers:

- Mucosal (innermost) layer
- Submucosal layer
- Muscularis (muscle) layer
- Subserosal layer
- Serosal (outermost, or external) layer

Gastric cancer begins in the innermost layer and can spread throughout the stomach and to other organs in the body.

### What are the risk factors for gastric cancer?

- A type of bacteria sometimes found in the stomach (called helicobacter pylori infection)
- Smoking
- Advanced age
- Family history of gastric cancer



The stomach and surrounding organs in the digestive system

- Diets containing large amounts of smoked, cured or salted foods may be associated with an increased risk of developing gastric cancer.

## **What are the symptoms?**

Patients with gastric cancer may have very few symptoms. The most common symptoms include weight loss, abdominal pain, nausea, vomiting and a loss of appetite.

## **What is staging?**

Staging is when testing is done in order to determine the size and location of the tumor and whether it has spread (or metastasized) to other places in the body. Staging is necessary in order to plan the best treatment. Your doctor may order a series of tests to help determine the stage of your cancer. All of these tests will be discussed in detail with you.

## **How is gastric cancer treated?**

Treatment for gastric cancer includes surgery, chemotherapy, radiation therapy and clinical trials. These treatments may be given alone or in combination with one another. Treatment for gastric cancer depends on the size, location and stage of the cancer, along with your general health.

### **Surgery**

Surgery is a common treatment for early stage gastric cancer. The operation is called a gastrectomy. During the gastrectomy, the surgeon may remove part or all of the stomach.

A subtotal gastrectomy includes removing the cancerous part of the stomach, nearby lymph nodes (tissue that filter infection and disease) and parts of other organs near the tumor.

A total gastrectomy involves removing the entire stomach, nearby lymph nodes and parts of the esophagus and small intestine. The esophagus is reconnected to the small intestine so the patient can continue to eat and swallow.

### **After Surgery**

A gastrectomy is major surgery. For the first few days after a gastrectomy, you will be fed intravenously (through a vein). You will then gradually be given liquids, followed by soft foods and then solid foods. Doctors often advise patients to eat several small meals throughout the day after a gastrectomy because you may feel full after eating only a small amount of food.

Eating well means getting enough calories and protein to help prevent weight loss, regain strength and rebuild normal tissues. Because good nutrition is extremely important for recovery, a dietitian will help you learn how to maintain a well-balanced diet. If your entire stomach has been removed, your body will no longer be able to naturally absorb vitamin B12. Therefore, you will require routine vitamin B12 replacement.

## **Radiation Treatment**

Radiation treatment, or radiation therapy, uses X-rays or other high-energy rays to kill cancer cells and shrink tumors. The radiation only affects cancer cells in the treated area. External beam radiation therapy is radiation delivered from a machine outside the body.

Radiation for gastric cancer is usually combined with chemotherapy to prevent tumor growth and to reduce symptoms resulting from the tumor.

Side effects from radiation to the stomach may include, but are not limited to:

- skin changes and inflammation of the stomach causing indigestion;
- heartburn and ulcers;
- inflammation of the bowel causing cramping and diarrhea;
- loss of appetite;
- nausea and vomiting; and
- fatigue.

Your doctor can prescribe medicine to relieve these side effects.

## **Chemotherapy**

Chemotherapy uses drugs to kill cancer cells. Your doctor may use one drug or a combination of drugs to treat your cancer. These drugs enter the blood and reach all areas of the body, making this treatment useful for cancer that has spread beyond the stomach. Chemotherapy can be given several ways, such as intravenously (through a vein) or by mouth. Patients usually receive chemotherapy on an outpatient basis, which does not require hospitalization.

Since chemotherapy medicines may affect some healthy cells as well as cancer cells, side effects can occur. Your doctor can prescribe medicines to help relieve the side effects. The medical team will give you detailed information and about the chemotherapy medicines your doctor has prescribed. Common side effects of chemotherapy include:

- nausea;
- diarrhea;
- fatigue;
- hair loss; and
- low blood counts (may increase the risk for infections and bleeding).

## **Chemoradiation**

Chemoradiation combines chemotherapy and radiation treatment. This combination makes both treatments more effective. Chemoradiation can be given before surgery to shrink the tumor or after surgery to destroy remaining cancer cells.

## **Clinical Trials**

Clinical trials are in progress to find the best ways to use chemotherapy to treat gastric cancer. New chemotherapy drugs are being studied in clinical trials as a treatment for cancer that has spread and as a way to relieve symptoms of the disease. Your doctor will tell you if you are eligible for a clinical trial.

## **What type of follow-up care is needed?**

You will need to have regular checkups after your treatment is complete. At each visit, your doctor will check for recurrence (return of the cancer) and check your progress and recovery. Follow-up visits may include physical exams, X-rays, computerized tomography (CT) scans and/or laboratory tests.

If you have questions or concerns after reading this information, ask your health care team.