

Backgrounder

(For Non-US Journalists Only)



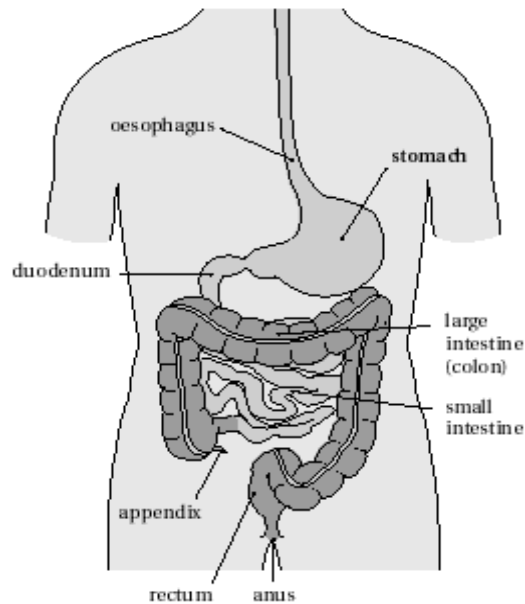
GASTRIC AND OESOPHAGEAL CANCER: THE FACTS

Gastric cancer is the second-leading cause of cancer deaths in the world.¹

GASTRIC AND OESOPHAGEAL CANCER

- Gastric (stomach) cancer, is a disease in which stomach cells become malignant (cancerous) and grow out of control, forming a tumour²
- Gastric and oesophageal cancers:
 - Are difficult to detect and diagnose
 - few symptoms in the early stages
- Most diagnoses are made at an advanced stage, where symptoms include:
 - discomfort in the upper or middle part of the abdomen
 - difficulty swallowing
 - blood in the stools (which appears as black, tarry stools)
 - vomiting or vomiting blood
 - sudden weight loss
 - pain or bloating in the stomach after eating
 - weakness or fatigue associated with anaemia (a deficiency in red blood cells)
 - early satiety (become full with small amounts of food)

GASTRIC AND OESOPHAGEAL CANCER AREAS



**Location of the stomach
in the digestive tract**

Source: BUPA

INCIDENCES AND PREVALENCE OF GASTRIC AND OESOPHAGEAL CANCER

- Gastric cancer is the fourth most commonly diagnosed cancer and the second leading cause of cancer-related deaths worldwide³
- In Europe alone, nearly 140,000 people die from stomach cancer each year⁴
- Gastric cancer occurs twice as often in men and is more common in people over the age of 55⁵
- Incidence is highest in Japan, South America, Eastern Europe, and parts of the Middle East⁵
- Amongst tumours of the upper GI tract, oesophagogastric cancer is more common in the West, whilst stomach cancer is predominant in the East⁶

RISKS AND CAUSES OF GASTRIC AND OESOPHAGEAL CANCER

- Age and gender
- A diet high in salt and nitrate and low in vitamins A and C increases the risk
- Food preparation (e.g. preserving food by smoking, salt-curing, pickling or drying)
- Environment (e.g., lack of refrigeration, poor drinking water)
- Medical conditions that increase the disease include pernicious anaemia (vitamin B-12 deficiency), chronic inflammation of the stomach (atrophic gastritis), and intestinal polyps (non-cancerous growths).

- Genetic risk factors include hereditary nonpolyposis colon cancer (HNPCC) syndrome and Li-Fraumeni syndrome (conditions that result in a predisposition to cancer), and a family history of gastrointestinal cancer.
- Type A blood
- Cigarette smoking
- Infection with *Helicobacter pylori* bacteria or Epstein-Barr virus
- Obesity
- Occupational factors (e.g., working in rubber and coal)
- Personal history of gastrointestinal cancer, previous abdominal radiation, or stomach surgery

DIAGNOSIS OF GASTRIC AND OESOPHAGEAL CANCER

- The types of tests carried out to diagnose gastric cancer include:
 - **Faecal occult blood test** - used to detect microscopic blood in the stool, which may indicate stomach or other gastrointestinal (GI) cancers (e.g., colorectal cancer)
 - **Complete blood count (CBC)** - a simple blood test used to measure the concentration of white blood cells, red blood cells, and platelets
 - **Upper GI series/barium swallow** - patient drinks a thick, chalky liquid (barium) that coats the oesophagus and stomach and makes it easier to detect abnormal areas on x-ray
 - **Double-contrast barium swallow** - air is blown into the oesophagus and stomach to help the liquid coat the wall of the organs more thoroughly
 - **Gastroscopy** - physician inserts a thin tube that contains a light and camera (called a gastroscope) through the mouth and oesophagus and into the stomach. The gastroscope allows the physician to see the inside of the stomach. Small instruments can be passed through the gastroscope and used to remove a sample of tissue for examination (biopsy) in a laboratory
 - **Computerized tomography (CT scan), ultrasound, and positron emission tomography (PET) scan** – imaging tests, which may be used to detect metastatic stomach cancer

TREATMENT AND MANAGEMENT OF GASTRIC AND OESOPHAGEAL CANCER

- Treatment for gastric cancer depends on:
 - Size
 - Location
 - Extent of the tumour
 - Stage of the disease
 - Patient's age and overall health

- **Surgery:** extent of surgery depends on the extent of the disease. Endoscopic mucosal resection may be used to treat early stomach cancer (i.e., tumour smaller than 3 cm that has not invaded beyond the innermost layer of the stomach lining [submucosa]). This procedure involves removing only the tumour and surrounding tissue
 - **Gastrectomy** - the most common treatment for stomach cancer. In this surgery, the entire stomach (total gastrectomy) or part of the stomach (partial or subtotal gastrectomy) is removed. Parts of nearby tissues or organs (e.g., the spleen) may also be removed. In most cases, surrounding lymph nodes also are removed (lymph node dissection). Surgery for cancer of the upper stomach (cardia) may require removal of the stomach and part of the oesophagus (called oesophagogastrectomy).
 - Following total gastrectomy, the oesophagus is attached directly to the small intestine. When a large section of the stomach is removed during partial gastrectomy, the surgeon reattaches the stomach to the oesophagus or small intestine. The connection between these organs is called an anastomosis.

- Other treatments for gastric cancer include:

Chemotherapy treatments:

Adriamycin, VP-16, Cisplatinum, Mitomycin, 5-FU and Leucovorin are among the most commonly used chemotherapy drugs for stomach cancer. These drugs are used in combination and can have moderate to severe toxic effects.

Non-chemotherapy treatments:

Radiation therapy is a cancer treatment that uses high-energy x-rays or other types of radiation to kill cancer cells. There are two types of radiation therapy. External radiation therapy uses a machine outside the body to send radiation toward the cancer. Internal radiation therapy uses a radioactive substance sealed in needles, seeds, wires, or catheters that are placed directly into or near the cancer.

Combination treatments:

Chemoradiation combines chemotherapy and radiation therapy to increase the effects of both. Chemoradiation treatment given after surgery to increase the chances of a cure is called adjuvant therapy.

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