

## Early Gastric Cancer

Gastric or stomach cancer is one of the common cancers in the current era, and it is reported to be the 4th most common cancer in the world. There are almost 990 000 people worldwide who are diagnosed with this condition. In South Africa, gastric cancer is the 7<sup>th</sup> most frequently reported type of cancer.

### What is a stomach?

It is a sac-like organ that holds food and initiates the digestion process by secreting gastric juice. The food and gastric juice are mixed and then emptied into the first part of the small intestine called the duodenum.

### What is stomach cancer?

The cells in the body have certain jobs to do. Normal cells divide in an orderly way. They die when they are worn out or damaged and new cells take their place. Cancer occurs when the cells start to grow out of control. Stomach cancer is a cancer that starts in the cells that line the stomach. Stomach cancer tends to develop slowly over many years and is therefore often only diagnosed at an advanced stage because there are no specific early warning signs or symptoms.

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

The following are known risk factors for stomach cancer:

- Family history of stomach cancer - if a first-degree family member (parents, siblings, or children) has had stomach cancer, it can increase one's risk.
- Gender – stomach cancer is more common in men than in women.
- Age - stomach cancer is commonly diagnosed in people who are over 55 years of age.
- Infection with *Helicobacter pylori* bacteria – this germ seems to be a major cause of stomach cancer
- Diet - a diet high in salty and smoked foods, red meat and pickled vegetables, and a diet low in fruits and vegetables increases the risk for developing stomach cancer.
- Smoking - people who smoke are twice as likely to develop stomach cancer.
- Alcohol consumption - alcohol has been declared as Group 1 cancer causing chemical by the International Agency for Research on Cancer (IARC) in 1988.
- Certain occupations - workers in the coal, metal, nickel refining, rubber, timber and asbestos industries seem to have a higher risk of getting stomach cancer.
- Pernicious anaemia - if a person lacks Vitamin B12, it can cause pernicious anaemia, which affects the lining of your stomach and increases the risk for stomach cancer.
- Stomach surgery — there is an increased risk of stomach cancer after a stomach surgery.
- A history or present polyp larger than 2cm in the

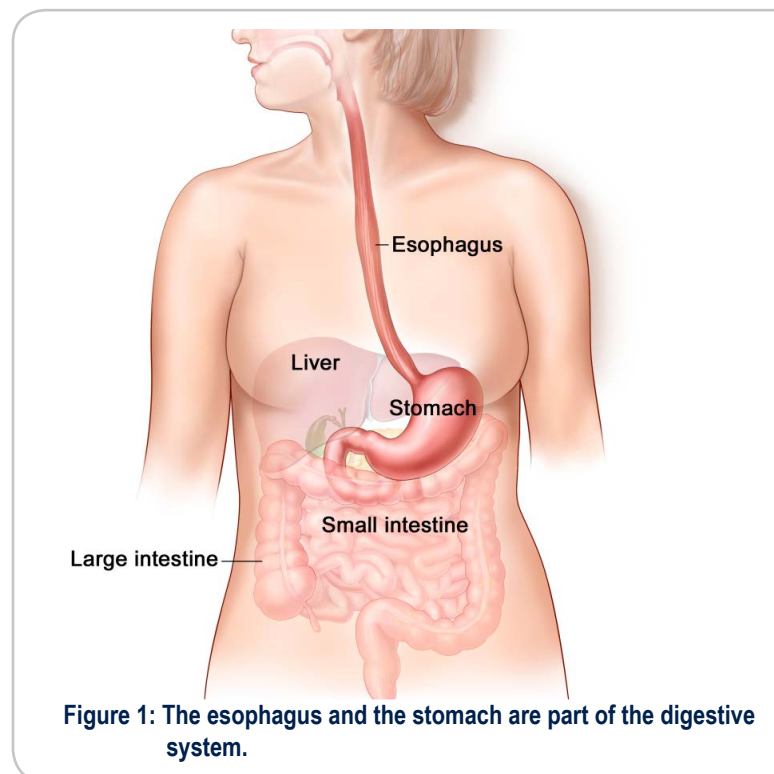


Figure 1: The esophagus and the stomach are part of the digestive system.

stomach increases the risk of stomach cancer.

- Inflammation and swelling of the stomach for a long time (chronic atrophic gastritis) and stomach ulcers also increase the risk for developing stomach cancer.

### **How do you prevent stomach cancer?**

There is no specific way to prevent stomach cancer, but there are things that you can do, that could lower your risk. The following may help to reduce the risk of stomach cancer:

- Do not smoke.
- Eat healthy food rich in fruits and vegetables.
- Take medicines to treat reflux disease (heartburn), if it is present.
- Take antibiotics if you are diagnosed with H. pylori infection.
- Reduce the amount of salty and smoked foods you eat.

### **Signs and symptoms of stomach cancer**

Early-stage stomach cancer is rarely preceded by symptoms. Most of the symptoms are likely to be caused by conditions other than cancer, such as a stomach virus or an ulcer. This is one of the reasons stomach cancer is so hard to detect early. The signs and symptoms of stomach cancer may include fatigue, bloated feeling after eating, feeling full after eating little, heartburn, indigestion and stomach discomfort, persistent nausea, loss of appetite, sensation of food getting stuck in the throat when eating, abdominal pain, vomiting shortly after eating, unintentional weight loss, diarrhoea or constipation.

### **Prescribed Minimum Benefits (PMBs)**

Cancer of the stomach is a PMB condition under the Diagnosis and Treatment Pair (DTP) code 950C. The treatment component specified for this DTP according to the PMB Regulations is Medical and surgical management, which includes chemotherapy and radiation therapy. The diagnosis, treatment and care of PMBs should be funded by medical schemes irrespective of your plan option.

### **Diagnostic tests and the PMBs**

- Full Blood Count (FBC), Liver and Kidney function tests are routinely done.
- Gastroscopy remains the gold standard investigation to detect and diagnose gastric cancer. A specimen from the stomach is usually taken during the procedure for analysis at the laboratory.
- Endoscopic ultrasonography (EUS) and computed tomography (CT) can be used to determine the invasion of cancer and the spread outside the stomach.

Diagnostic laparoscopy is strongly recommended as an additional tool for cancer staging.

- Chest X-ray may be used to detect lung metastases. A CT scan of the chest, abdomen and pelvis is useful in identifying the tumor, assessing the spread of the cancer as well as lymph node involvement.

The above-mentioned tests constitute PMB level of care for cancer diagnosis. Positron Emission Tomography (PET) scan is not recommended as PMB level of care. The value of PET scan in diagnosis and evaluation remains controversial.

### **Treatment options and the PMBs**

1. Surgical interventions of early stage gastric cancer that are PMB level of care:

#### Endoscopic resection

It is a minimally invasive procedure that allows for the removal of the tumor while preserving the stomach.

#### Total gastrectomy with lymph node resection

This procedure involves total removal of the stomach. The procedure can be done by laparoscopy or by opening the abdomen.

#### Oesophagogastrectomy with lymph node resection

This surgery involves the removal of the lower portion of the oesophagus and the proximal or upper portion of the stomach.

#### Subtotal gastrectomy with lymph node resection

This procedure is associated with better nutritional outcomes and better quality of life when compared with total gastrectomy.

2. Chemotherapy

The following chemotherapy agents are used only for the treatment of stomach cancer and constitute PMB level of care:

- Epirubicin
- 5FU
- Cisplatin
- Capecitabine

3. Radiation therapy

Radiation therapy in early gastric cancer is considered PMB level of care.

## References

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### WHAT ARE PRESCRIBED MINIMUM BENEFITS?

Prescribed Minimum Benefits (PMBs) are defined by law. They are the minimum level of diagnosis, treatment, and care that your medical scheme must cover – and it must pay for your PMB condition/s from its risk pool and in full. There are medical interventions available over and above those prescribed for PMB conditions but your scheme may choose not to pay for them. A designated service provider (DSP) is a healthcare provider (e.g. doctor, pharmacist, hospital) that is your medical scheme's first choice when you need treatment or care for a PMB condition. You can use a non-DSP voluntarily or involuntarily but be aware that when you choose to use a non-DSP, you may have to pay a portion of the bill as a co-payment. PMBs include 270 serious health conditions, any emergency condition, and 25 chronic diseases; they can be found on our [website](#)

The Communications Unit would like to thank the Clinical Unit for assisting with this edition of CMScript

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