CANCER OF OESOPHAGUS AND STOMACH

By: Dr. Wong Kwong Hieng
(MBBch,FRCS,AM)
General Surgeon
TIMBERLAND MEDICAL CENTRE
DIGESTIVE SYSTEM
Oesophageal cancer is a relatively rare form of cancer.

As an example in USA approximately 16,000 new oesophageal cancer cases are diagnosed yearly (out of population of 300 millions).

However, higher incidence is noted in China, India, Japan and UK and in African-American.
According to the anatomy of the oesophagus, there are essentially two types of cancer of oesophagus.

Squamous cell carcinoma - in the upper 2/3 of oesophagus related to head & neck cancer and associated with smoking and alcohol consumption.

Adenocarcinoma – in the lower 1/3 of oesophagus related to gastroesopahgeal reflux disease and Barrett’s oesophagus
MALIGNANT TUMORS OF THE OESOPHAGUS

Image 1

Image 2
SIGNS AND SYMPTOMS

- Dysphagia (Difficulty in swallowing)
- Odynophagia (Painful swallowing)
- Weight Loss
- Vomiting
- Haematemesis
- Metastases
CAUSES AND RISK FACTORS

- Age
- Gender
- Heredity
- Smoking and heavy alcohol
- Diet (caustic substances, nitrosamine, preserved and smoked)
- Radiation therapy
- Gastroesophageal reflux disease and Barrett’s oesophagus.
- Obesity
DIAGNOSIS

- Best made with Endoscopy and biopsy
- X-ray (Barium swallow) and CT scan
TREATMENT

- Surgery
- Chemotherapy
- Radiotherapy
- Laser therapy
- Neoadjuvant chemoradiation
- Stenting

Surgery difficult due to anatomy and accessibility compared to stomach cancer.
Shows cancer blocking esophagus. Insets show enlarged area of cancer and a stent placed in the esophagus to keep it open.

Self-expandable metallic stents are used for the palliation of esophageal cancer.
FOLLOW-UP AND PROGNOSIS

Poor, 5 year survival less than 25%
CANCER OF STOMACH

EPIDEMIOLOGY

Stomach cancer is a more common cancer than oesophageal cancer.

In USA about 26,000 new cases of stomach cancer are diagnosed each year. Roughly representing 2% of all new cancer cases each year.

However, it is much more common in Korea, Japan, UK, South America and Iceland.
CLASSIFICATION

- Mostly adenocarcinoma (epithelial tumour)
- Lymphoma
- Linitus Plastica (leather-bottle stomach) scirrhous carcinoma
NORMAL IMAGES OF THE STOMACH

Image 1

Image 2

Image 3
MALIGNANT TUMORS OF THE STOMACH

Image 1

Stomach Cancer

Image 2

Stomach Cancer
SIGNS AND SYMPTOMS

**EARLY**

- Often asymptomatic or non-specific in early stages (delayed diagnosis)
- Indigestion / Heartburn
- Loss of appetite

**LATE**

- Abdominal Pain
- Nausea & Vomiting
- Diarrhoea & constipation
- Bloating after meals
- Weight Loss
- Weakness
- Bleeding & Anaemia
CAUSES AND RISK FACTORS

- Age
- Gender
- Heredity / Genetic
- High Salt Diet
- Smoking
- Lack of fruits / veggie
- H. Pylori infection (80%) associated with gastritis and intestinal metaplasia
HELICOBACTER PYLORI
Korea and Japan have very high incidence of stomach cancer. In Korea 21% of cancers are from stomach (compared with 2% in USA) and it is the second leading cause of cancer deaths. (In Malaysia leading causes of cancer deaths are lung, breast, colon, ovarian /uterine, nasopharyngeal, liver, stomach, oesophagus). A Korean diet high in salt content (pickled chinese cabbage known as Kimchi) is thought to be a contributing factor.
DIAGNOSIS

- Endoscopy and biopsy
- X-ray (barium meal)
- Blood and Stool Tests
  (Tumour marker e.g. CA 19.9, CEA, FOB)
- CT Scan
An endoscope is a thin flexible telescope

Devices can be passed down side channels

At tip of endoscope is a light and a camera to see inside

Grabbing instrument to do biopsies

Endoscope passed down oesophagus into stomach

Cables for power input and to screen
TREATMENT

- Surgery
- Chemotherapy
- Radiotherapy
FOLLOW-UP AND PROGNOSIS

- Early diagnosis and surgery offers best chance of cure.

- Often late diagnosis leading to 80% of cases with metastasis at presentation.

- 5 year survival rate from 30% to 75%.
THANK YOU FOR LISTENING