KYMSURGERY

CANCER OF THE OESOPHAGUS

A bitter pill to swallow

Cancer of the food pipe/gullet (oesophagus) is the 8th most common cancer and the 6th most common cause of cancer-related-deaths worldwide. Most of us will experience a few episodes of heartburn or the sensation of bitter taste/acid in our mouth on a monthly basis and this is a common aspect of modern life causing no concern. It may be triggered by the food we eat, poor eating habit, stresses in life, medication, being overweight or habits such as smoking and alcohol. Most of us would take a short trip to the local pharmacy for an acid remedy or make an appointment to the local family doctor for treatment. However, when it becomes intractable and constant, it becomes a worry as this may be the first sign of oesophageal cancer. When the cancer develop and enlarges, there will be a sensation of food begin stuck at the throat or in center of the chest. Eventually, it may lead to the inability to swallow anything (dysphagia) as the cancer grows and the opening of the food pipe becomes completely blocked. Swallowing of water, food or pills becomes impossible. It may also present with vomiting blood or unintentional weight loss.

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There are two main types of oesophageal cancer and these are "squamous cell carcinoma" and "adenocarcinoma."

In developed Western population, being overweight is a major problem with central obesity and a large rotund stomach. At the lower part of the oesophagus, there is a muscular valve which keeps the stomach acid away from the oesophagus. Being obese, puts pressure on the stomach leading to the acid refluxing back into the oesophagus and producing the symptoms of heartburn or pain in the chest. This being commonly referred to as acid reflux. If this damage from the acid is persistent and severe, it will lead to the development of inflammation and subsequent changes in the cells lining (Barret's oesophagus) with the potential development of cancer (adenocarcinoma) at the lower portion of the oesophagus.

In the East, squamous cell carcinoma is the pre-dominant cancer and this is considered more aggressive and occurs higher up in the oesophagus than the adenocarcinoma. The main risk factor for developing this type of cancer is smoking.

RISK FACTORS FOR OESOPHAGEAL CANCER:

1. Age (increased incidence over the age of 60)
2. Gender - men are more likely than women to get oesophageal cancer
3. Obesity
4. Persistent chronic acid reflux leading to Barrett's oesophagus
5. Smoking
6. Alcohol – chronic and heavy drinkers
7. Ethnicity (Caucasian – adenocarcinoma)
8. Caustic injury to the oesophagus
9. Infection with human papillomavirus (HPV) - squamous cell carcinoma
10. Diet high in processed meat and lacking fresh fruit and vegetables
11. Previous history of other cancers
12. Other conditions – Achalasia, Tylosis, Plummer-Vinson Syndrome

When the symptoms of heartburn persist despite medication or dysphagia occurs, it will warrant immediate investigation in the form of an upper endoscopy (gastroscopy). This is a flexible camera which is guided down into the oesophagus to allow direct imaging of the oesophagus and biopsy of any tumour or cancer. Early treatment is imperative for a better outcome/prognosis and to enhance the chance of survival. Staging of the cancer is the next step with CT scans to aid the assessment to whether the cancer is localised or have already spread. The only cure is the viability of surgery to excise the cancer. However, if the cancer have spread to distant organs it will unfortunately mean only palliation with chemotherapy and maybe placing a stent across the tumour to allow the passage of food. If the cancer is more advance but it is still localised, then chemotherapy +/- radiotherapy/ immunotherapy may be given before or after the surgery. This helps to increase the potential of a cure with surgery.

Surgery is a major undertaking and it involves operating in both the abdominal and chest cavity to remove cancer from the long oesophagus. Traditionally, this operation is performed by open surgery with a large incision in the chest (thoracotomy) and a similar long incision in the abdomen. Once the oesophagus is removed, the stomach is made into a thin tube (2-finger width) and pulled up into the chest to reconnect the remaining oesophagus to the stomach.

With the technical advances in medical equipment and surgical techniques, keyhole surgery (minimally invasive laparoscopic/thoracoscopic surgery - MIS) has been demonstrated to be superior in outcome compared to conventional open surgery and this is true for oesophageal cancer. There is a shorter hospital stay, less requirement of intensive care unit admission, lower overall complication rates and faster return to normal function. The risk of pneumonia after surgery to remove the oesophagus by the keyhole method is reduced by as much as 40%.

After surgery, eating the large big meals will no longer be possible since the stomach which previously acted as a large reservoir bag (normally can hold upto 1.5L of fluid/food) has been reduced to a long small tube. However, the type of diet can remain the same and recovery is dependent on eating healthily with good amount of proteins and nutritional supplement over the following 4-6 weeks. Further treatment such as chemotherapy may be needed after surgery if the cancer has been found to have extending outside the oesophagus to the lymph glands that were removed and examined.

Moreover, the prognosis of advanced oesophageal cancer is poor. If oesophageal cancer can be detected early and surgery is undertaken, the 5-year survival rate will be more than 90%. For more advances cases the survival reduces to 47% for bigger cancers, 25% if spread nearby and <5% if the cancer has spread to distant organs. Early detection along with surgery are crucial to surviving from this disease.

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- Stage I: Five-year survival is 55 percent
- Stage II: Five-year survival is 30 percent
- Stage III: Five-year survival is 15 percent
- Stage IV: Sadly, many people don't live beyond a few months

The spectral of the cancer recurring after surgery even with adjuvant treatment is ever present for every patient for the next 5-10 years. Patients should still live a healthy life but they will require very close follow up with yearly gastroscopy and CT scans to ensure that the cancer has not returned.

Early detection is paramount to surviving this disease and to enable a cure. Any worrying symptoms of persistent heartburn or dysphagia should ring alarm bells and it should signal the need to seek medical opinion. Prevention is always the key-point with any condition and therefore avoiding any risk factor is crucial. In preventing oesophageal cancer, risks factors which we can control are smoking, excessive alcohol, obesity, reflux and dietary risks. Living and working in modern society should not negate one's health and keeping healthy is so important to enjoy our lives with our family and love ones. Keep safe and well.

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