bizcommunity

'Sponge on a string' trial launched to try and prevent deadly oesophageal cancer

Cancer Research UK has launched a large multi-centre trial to test a new device for detecting Barrett's oesophagus - a condition that puts sufferers at increased risk of developing cancer of the oesophagus, one of the most deadly cancers.

Cancer of the oesophagus, CT with contrast, axial image. (Image: Tdvorak, via Wikimedia Commons)

In the last 30 years oesophageal cancer rates have risen dramatically in the UK compared with many other Western countries, particularly for a certain type called adenocarcinoma, which is linked to Barrett's oesophagus.

The trial will examine whether a promising new test called 'cytosponge' could provide an improved method of identifying patients with Barrett's oesophagus, so they can be offered treatment to reduce their risk of oesophageal cancer.

The test involves patients swallowing a small capsule with a string attached, which dissolves in the stomach and expands to form a 3cm sponge.

The procedure

The sponge is gently drawn back out using the string, removing a small sample of the cells lining the oesophagus as it passes, which can be tested in the lab for early signs of cancer.

Each test should cost just £25, compared with £400 for a traditional endoscopy, and the procedure is far less invasive.

Chief investigator Dr Rebecca Fitzgerald, who led the Cambridge-based team that developed the cytosponge test, said: "If this trial is successful it will provide a cheap, safe and highly effective method of identifying people with Barrett's oesophagus, so they can take steps to reduce their risk of developing cancer.

"This would open the doors for a national screening programme, much like those offered for breast, cervical and bowel cancers, to help prevent oesophageal cancer among the one to two people in every 100 with Barrett's oesophagus who go on to develop the disease."

Oesophageal cancer is the sixth most common cause of death from cancer in the UK, with around 7500 people dying from the disease each year. It is often diagnosed at a late stage, making it difficult to treat, and

this largely accounts for the poor survival rates.

Warning signs

Persistent heartburn or indigestion, caused by stomach acid coming back up the gullet, is a major risk fact for cancer of the oesophagus. Over time this can cause the cells lining the lower oesophagus to start to resemble those found in the small and large intestines, a condition known as Barrett's oesophagus.

However, if the condition can be diagnosed before cancer develops, patients can be offered closer monitoring and treatment to help remove abnormal cells.

At present the condition can only be detected by 'endoscopy' - a relatively expensive procedure which involves putting a camera down the throat to collect a sample of the cells the lining the oesophagus for analysis under the microscope.

Most patients with heartburn symptoms take medication without ever having an endoscopy, meaning case of Barrett's oesophagus often go undiagnosed.

Happy to do the trial

Dudley Hedge, 71, from Cambridge, has been involved with the cytosponge trial. He said: "It is important t get a diagnosis quickly and I was happy to be on the trial. Having the cytosponge was a relatively straightforward procedure and I would definitely encourage others to take part."

Earlier pilot studies, funded by the Medical Research Council, found that patients significantly preferred cytosponge compared to endoscopy. This latest study will look more closely at the accuracy of the test ar identify new biomarkers for diagnosing the different grades of Barrett's oesophagus more reliably.

Kate Law, director of clinical trials at Cancer Research UK, said: "Oesophageal cancer is one of the most difficult cancers to detect and treat, with only 8% of people with the disease surviving over five years. Hopefully this trial will provide a simple means of screening people for Barrett's oesophagus on a much larger scale, so those at high risk can be offered closer monitoring and measures to help prevent them developing this devastating form of cancer."

Source: Cancer Research UK