NIHR | Guy's and St Thomas' Biomedical Research Centre

NHS Guy's and St Thomas' NHS Foundation Trust

Our research explained

BRCsnapshots

Using saliva to predict the risk of oesophageal cancer

What we know

Barrett's Oesophagus is a condition where abnormal cells are found in the oesophagus (also known as the gullet or food pipe).

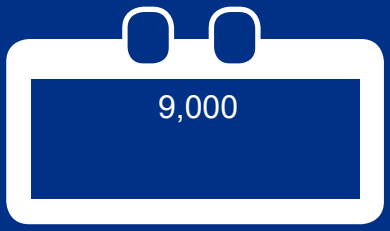
Barrett's Oesophagus doesn't usually have any symptoms but can sometimes develop into a cancer called oesophageal adenocarcinoma if left untreated.

Currently the only way we can find out if someone has cancerous cells in their oesophagus is to bring them into hospital to have a procedure called an endoscopy, where a camera is passed down the throat to look for abnormalities.

Because of the higher risk of cancer in people with Barrett's Oesophagus, they are given endoscopies every 6 months to 5 years (depending on their previous results).

If abnormal cells (dysplasia) are found, it can be treated with endoscopy procedures, which reduce the risk of cancer. Early diagnosis is therefore vital to better patient care.

Around 7 in 10 cases of oesophageal cancer are diagnosed at a late stage in England



The number of endoscopies currently performed at Guys and St Thomas' every year

Oesophageal cancer is the 6th most common cause of cancer related deaths in the UK

What we are doing

Researchers at Guy's and St Thomas' and University College London are working together to find markers (information that suggests a person might have a disease) in saliva which are more common in people with Barrett's Oesophagus or Oesophageal Cancer.

We are working with our patients with known or suspected Barrett's Oesophagus or Oesophageal cancer who are due to have an endoscopy. If the patient agrees, we take samples of their saliva and blood as well as samples from their oesophagus. All these samples are sent to a lab where they are processed and their genetics are analysed.

How will this change care

"We have already found several markers in saliva which are associated with oesophageal disease. We are now working on a test to identify these markers. This would mean that only those at most risk would need to have an endoscopy.

We might be able to test more people this way as the saliva test will be much quicker, cheaper and with no risks. This may also help us to diagnose and treat Barrett's Oesophagus earlier and and treat it before it has the chance to develop into cancer."

Dr Jason Dunn, Principal Investigator at Guy's and St Thomas' NHS Foundation Trust

About the study
The study was supported by the NIHR Guy's and St Thomas' Biomedical Research Centre.

Further information
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Patient and Public Advisory Group (PPIAG)
This research snapshot has been put together with support of the Patient and Public Advisory Group. To find out more about how you can work with us to improve healthcare through research contact brcppi@gstt.nhs.uk

About our NIHR Guy's and St Thomas' Biomedical Research Centre
Our NIHR Biomedical Research Centre is a partnership between Guy's and St Thomas' NHS Foundation Trust and King's College London. We work to develop and deliver new medicines and diagnostics to patients. We drive research and innovation into the NHS to provide maximum impact to our patients.
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