



Stomach cancer, reducing the risk and finding new treatments

Over 7000 people are diagnosed with stomach cancer every year in the UK. The most successful treatment option to date is surgery to remove the tumour and sometimes part or all of the stomach. People may also receive chemotherapy and radiotherapy, but despite this, sadly only about 17 in 100 beat their disease for five years or more.

Thanks to the contribution of our scientists, the number of people surviving stomach cancer has trebled over the last 25 years, but we need to increase our efforts to develop even more efficient ways to prevent and treat the disease to help more people survive.

Professor Sir Nicholas Wald's research

Most cases of stomach cancer have been attributed to the bacterium *H. pylori*. This bacterium lives in the stomach of many of us where generally harmless but studies have indicated that in some people it can increase the risk of stomach cancer as much as five times.

It is not currently known whether screening for and treating people with this infection can reduce this excess risk and hence the number of cases of stomach cancer.

To answer this question, Professor Sir Nick Wald of Queen Mary University of London is running a long term clinical trial to find out if eliminating *H. pylori* from the stomach of infected people can effectively reduce their risk of developing stomach cancer in the future.

In collaboration with BUPA, the researchers are offering people attending the clinics for health check-ups a screening for *H. Pylori*. If they are found to have the bacteria in their stomachs, they are offered a treatment to get rid of the infection. The screening tests are offered randomly to obtain unbiased results.

Several years down the line (15 years or more) the researchers will record the number of people that developed stomach cancer among those that were infected with *H. Pylori*, those who didn't have it and those that did and received the treatment. They will then be able to connect eradication of the infection with the risk of developing stomach cancer.



If the trial shows that the excess risk of cancer is reversible, this would mean that most cases of stomach cancer in the world could be prevented by screening for the bacterium and getting rid of it when found.

Professor David Cunningham's research

Chemotherapy combined with surgery for stomach cancer can lower the risk of the cancer coming back. In a clinical trial, scientists showed that giving patients a combination of chemotherapy drugs called ECF before, during and after surgery helped people treated for stomach cancer to live longer.

Professor David Cunningham of the Royal Marsden Hospital in Sutton is working to improve this treatment even further. He is adding a new ingredient to the chemotherapy cocktail, Bevacizumab, a drug that affects the ability of the tumour to create new blood vessels.

Tumour cells, like normal ones, need a stable blood supply to obtain all the chemicals they need to survive and grow. Drugs that impair the tumour's ability to create new blood vessels are promising tools in the fight of all cancers, especially in combination with other treatments.

Dr Cunningham is comparing chemotherapy alone with chemotherapy and bevacizumab, both before and after surgery. This trial could find out if this new treatment can save more lives and is efficient in preventing cancer from returning.