

Acid reflux? It's in the genes

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(Medical Xpress)—For many years it has been thought that acid reflux and a related condition called Barrett's Oesophagus were acquired conditions, via diet, smoking and other lifestyle activities. However, recent family and twin studies have shown that those with Barrett's Oesophagus may have their genes to thank for their predisposition to this condition.

According to authors of a commentary published in leading journal *Gastroenterology* today, 2nd April 2013, from Plymouth University Peninsula Schools of Medicine and Dentistry and University of Edinburgh, the findings of such new studies could well lead to clinical solutions and therapies to treat the condition and halt its progression to cancer of the oesophagus.

Barrett's Oesophagus is a common condition that if left untreated can lead to oesophageal adenocarcinoma in up to two per cent of the population (up to one and a quarter million people in the UK). It causes a change in the cells of the oesophagus which occurs when [acid reflux](#) enters it from the duodenum above the stomach. People who suffer from a lot of indigestion, and have done so for a long time, are most at risk. The prognosis of such tumours is still poor and has an economic impact: in the United States \$100,000 dollars are spent to detect each cancer.

Treatment for Barrett's Oesophagus are unproven but involve surgery. When premalignant (precancer) develops the area is removed either by endoscopic surgery (endoscopic resection) or [open surgery](#) (oesophagectomy).

According to the authors of today's commentary in Gastroenterology, a better understanding of the [genetic causes](#) of Barrett's Oesophagus could lead to non-surgical therapies.

Professor Janusz Jankowski, one of the authors from Plymouth University Peninsula Schools of Medicine and Dentistry and Queen Mary University of London, said: "Recent studies highlighting a [genetic element](#) to the causes of Barrett's Oesophagus, including one published last year in *Nature Genetics* where I was lead author, make a potentially exciting contribution to the options available to us to develop non-surgical interventions and therapies. We have some way to go before such a solution is found, and people should not use these findings as a reason to ignore advice about lifestyle and diet - the same studies showed that smoking and dietary factors exacerbate the genetic elements of the condition."

He added: "The main success is that, before this, we would never have imagined Barrett's Oesophagus as having the potential to be an immune-mediated disease in the way conditions such as rheumatoid arthritis, psoriasis and inflammatory bowel disease are – it emphasises how little we really know."

Provided by University of Plymouth

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