follow-up period of 43.8 ± 9.3 months. The authors suggest that GERD treatment be made common practice to reduce ring recurrence in patients with GERD. Five of the 30 patients without GERD were lost to follow-up, but 8 of the remaining 25 patients had recurrence after a mean follow-up period of 40.6 ± 12.2 months: all were successfully treated by repeat bougienage. The authors indicate that factors other than the type of endoscopic therapy correlate with ring recurrence and that they offer scope for further investigation.

Original article Sgouros SN *et al.* (2007) Single-session, graded esophageal dilation without fluoroscopy in outpatients with lower esophageal (Schatzki's) rings: a prospective, long-term follow-up study. *J Gastroenterol Hepatol* **22:** 653–657

Aspirin does reduce the long-term risk of colorectal cancer

Randomized trials suggest that aspirin reduces adenoma recurrence in patients with a history of adenomas or colorectal cancer (CRC), but is ineffective for the primary prevention of CRC after 10 years of follow-up; however, the development of CRC from adenoma typically involves a latency period of ~10–15 years.

Flossmann and Rothwell assessed the long-term effect of aspirin on the incidence of CRC in two large randomized trials, each with a median follow-up of >20 years. The British Doctors Aspirin Trial randomized 5,139 doctors in a 2:1 ratio to 500 mg aspirin (or, if later requested, 300 mg) or no aspirin daily for 5 years. The UK Transient Ischaemic Attack Aspirin Trial randomized 2,449 patients to aspirin (1,200 mg or 300 mg) or placebo daily for 1–7 years: to give a 2:1 aspirin versus placebo ratio, the two aspirin groups were later combined.

Daily aspirin use of at least 300 mg for ~5 years significantly reduced the prevalence of CRC with a latency of 10–14 years. No significant reduction in the prevalence of CRC occurred either 5–9 years or ≥15 years after randomization (i.e. >10 years after the trial treatment was stopped). A review of 30 observational studies (19 case–control, 11 cohort) supported the findings of these trials and revealed that the association between aspirin and a reduced prevalence of CRC weakens with low and/or infrequent aspirin doses. The authors suggest that the efficacy of infrequent and/or low aspirin doses be determined by long-term follow-up of other, similar trials.

Original article Flossmann E and Rothwell PM (2007) Effect of aspirin on long-term risk of colorectal cancer: consistent evidence from randomised and observational studies. *Lancet* **369:** 1603–1613

Pancreatic cancer and microRNA expression patterns

Researchers in the US have identified a global microRNA (miRNA) expression pattern that can differentiate pancreatic cancer from either normal pancreas or chronic pancreatitis with 95% accuracy.

miRNAs are small noncoding RNA molecules that bind to messenger RNA causing its inhibition or degradation. By inhibiting the expression of tumor-suppressor genes or promoting proto-oncogene expression, aberrant miRNA expression can promote carcinogenesis in human cancers.

Bloomston and colleagues collected diseased pancreatic tissue samples from patients with ductal adenocarcinoma of the pancreas ($n = 65$) and chronic pancreatitis ($n = 42$). Tissue samples were also collected from adjacent benign areas of the pancreas in all pancreatic cancer patients. RNA was extracted from these samples, and hybridized to miRNA microarrays. The team found 25 miRNAs for which expression was either increased or decreased in pancreatic cancer, and could correctly distinguish benign from cancerous tissue in 90% of samples. They also found 23 miRNAs with an expression profile that could distinguish cancer from chronic pancreatitis with 93% accuracy. Long-term survivors of pancreatic cancer who had positive lymph nodes could be distinguished from short-term survivors who died within 24 months by the differential expression patterns of six miRNAs. High expression of one miRNA, *miR-196a-2*, was predictive of poor survival ($P = 0.009$).

The authors conclude that their preliminary findings might, with further validation, enable clinicians to differentiate between benign and malignant tissue and between patients with better and worse prognoses, which would help guide management decisions.

Original article Bloomston M *et al.* (2007) MicroRNA expression patterns to differentiate pancreatic adenocarcinoma from normal pancreas and chronic pancreatitis. *JAMA* **297:** 1901–1908

© 2007 Nature Publishing Group