

BARRETT OESOPHAGUS

Using length of Barrett oesophagus to determine risk of progression to high-grade dysplasia and adenocarcinoma

“Previous reports in small numbers of patients with Barrett oesophagus have suggested a relationship between the length of Barrett oesophagus and cancer risk,” explains Prateek Sharma (University of Kansas School of Medicine, USA). As the relationship was not consistent in these small studies, Sharma and colleagues investigated the association in a large cohort of patients.

The cohort included 1,175 patients with Barrett oesophagus but no dysplasia who were followed up for at least 1 year at five different tertiary care centres in the USA (participants of the Barrett Esophagus Study). Of these patients, 44 developed high-grade dysplasia or oesophageal adenocarcinoma. The researchers plotted the annual risk of progression in increments of 3 cm of Barrett oesophagus (≤ 3 cm, 4–6 cm, 7–9 cm, 10–12 cm and ≥ 13 cm).

Patients who progressed to high-grade dysplasia or oesophageal adenocarcinoma were found to have a longer length of Barrett oesophagus than patients who did not progress. Indeed, every 1 cm increase in the length of Barrett oesophagus increased the risk of progression by 28%.

In addition, patients with a length of Barrett oesophagus ≤ 3 cm took longer than patients with a length >4 cm to progress to high-grade dysplasia or oesophageal adenocarcinoma (6 years versus 4 years). According to the researchers, surveillance intervals for patients with short segments of Barrett oesophagus could therefore be extended from the usual 3 years to 5 years.

The authors suggest that these results support the development of a risk stratification scheme based on length of Barrett oesophagus. Sharma and co-workers are planning to determine the optimal cut-off length that can separate low from high-risk patients, which could lead to tailored treatment.

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