

OC-070

LIFETIME RISK OF OESOPHAGEAL ADENOCARCINOMA IN PATIENTS WITH BARRETT'S COLUMNAR-LINED OESOPHAGUS REGISTERED WITH UK NATIONAL BARRETT'S OESOPHAGUS REGISTRY

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Introduction The annual rate of development of high-grade dysplasia or adenocarcinoma in Barrett's columnar-lined oesophagus is 1.0%.^{1,2} This study uses data from the UK National Barrett's Oesophagus Registry (UKBOR) and the Office of National Statistics to predict the average number of surveillance endoscopies and lifetime risk of development of high-grade dysplasia and adenocarcinoma.

Methods Data on patient gender, age at columnar-lined oesophagus diagnosis and date of columnar-lined oesophagus diagnosis were collected for patients diagnosed between 1994 and 2008 from centres registering ≥ 20 patients with UKBOR. Patients were included if aged between 18 and 95 years at date of diagnosis. This yielded a total of 7877 patients from 36 centres in the UK. Life expectancy/years at risk was evaluated using age at diagnosis and predicted life years from life expectancy tables.³

Standard surveillance practice was modelled as a single endoscopy at diagnosis with 3 yearly surveillance for no dysplasia and 6 monthly follow-up endoscopy for low-grade dysplasia or indefinite changes for dysplasia (14.7% of diagnostic endoscopy findings and 19.6% of subsequent endoscopy findings).

Results There were 5137 males, mean age 61.6 years at diagnosis and 2740 females, mean age 67.3 years at diagnosis. The mean predicted years of life (exposure time to the risk of developing malignancy in the metaplastic segment) were 23.1 and 20.7 years, respectively, and 22.2 years overall. This would predict that the lifetime risk of developing high-grade dysplasia or cancer would be between 1:4 and 1:5 and of adenocarcinoma would be between 1:7 and 1:8. The average number of surveillance OGDs during a patient's lifetime using the above surveillance protocol is 9.8 per patient.

Conclusion These data predict a significant lifetime risk of development of high-grade dysplasia or adenocarcinoma in patients diagnosed with Barrett's oesophagus. The total burden of surveillance endoscopies excluding those for therapeutic interventions to the metaplastic segment or for follow-up of high-grade dysplasia, cancer or endoluminal treatment is 9.8 per patient.

Competing interests None.

Keywords Barrett's adenocarcinoma, Barrett's oesophagus, epidemiology, oesophageal adenocarcinoma, oesophageal cancer, oesophagus.

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