

‘What if you missed something?’ – post-OGD cancer incidence and what to tell people

Authors: Adnan Ur Rahman,^A Aram Baghomian,^B Jong Eun Song,^B Mehwish Mussarat^B and Anya Bos^B

Introduction

The current gold standard for investigation of upper gastrointestinal (UGI) symptoms is to perform a oesophago-gastro-duodenoscopy (OGD). The 2017 quality standards state that a post-OGD UGI cancer (POUGIC) detected within 3 years of the index endoscopy should be considered a failure to diagnose cancer earlier and that the POUGIC rate not exceed 10%. We undertook an audit of cancer after endoscopy and factors that led to a delay in diagnosis of malignancy.

Method

We carried out a prospective audit of people who had an OGD in 2014 at Glan Clwyd Hospital, using the endoscopic database to identify indications and findings of repeat endoscopy and how many diagnosed with UGI cancer within 3 years. POUGIC rate was audited during the same 3-year period for a 2017 cohort from the cancer database. The World Endoscopy Organization standards for post-colonoscopy cancer definitions were used to calculate POUGIC rate (cancer missed divided by cancer detected plus cancer missed) and missed cancer within 6 to 36 months of endoscopy.

Result

In 2014, 1,758 patients had an OGD, repeated in 296 (16.8%) patients with 6 (0.3%) diagnosed with cancer within 3 years of index OGD. Range of OGD to delayed cancer was 6 to 34 months. One Barrett's with low grade dysplasia (LGD) was under appropriate follow-up and one delayed surveillance. One patient had a gastric ulcer which healed but not biopsied and later found to be malignant. Another had a gastric polyp not biopsied found to be a gastric neuroendocrine adenocarcinoma later. One case of oesophagitis endoscoped by a low OGD volume endoscopist later developed oesophageal cancer. One case had oesophagitis with cellular atypia deemed to be inflammatory developed squamous carcinoma. Thirty-four patients referred for repeat endoscopy for the same non-alarm indication did not have cancer.

In 2017, 82 patients were diagnosed with UGI cancer, four had an OGD in the previous 3 years; the POUGIC 3-year rate was 4.9%.

Discussion

Our POUGIC is within standard and the incidence of UGI cancer within 3 years of a negative endoscopy is low (0.3% in our study). Repeat endoscopy for the same non-alarm symptoms appears to be an unnecessary investigation, particularly if the aim is to exclude malignancy, which has implications for prudent healthcare.

We identified learning points where cancers were missed. In two cases no biopsies taken from pathology, this may be difficult to defend if challenged, and one case was not followed up as per standard. One index endoscopy was performed by a low-volume user.

We have seen a significant improvement in the quality of colonoscopy following the implementation of auditable measures, we hope that similar implementation of standards may replicate improvement in UGI endoscopy in our unit, removing the issues identified in our study. ■

Conflicts of interest

None declared.

Authors: ^AGlangwili Hospital, Carmarthen, UK; ^BGlan Clwyd Hospital, Bodelwyddan, UK