could potentially provide an immediate reflection of dietary adherence, although the sensitivities remain suboptimal and cannot replace histological assessment.

REFERENCES

1. Biagi F, Bianchi PI, Marchese A, *et al.* A score that verifies adherence to a gluten-free diet: a cross-sectional, multicentre validation in real clinical life. *Br J Nutr.* 2012 Nov 28; **108**(10):1884–8.
2. Leffler DA, Dennis M, Edwards George JB, *et al.* A simple validated gluten-free diet adherence survey for adults with celiac disease. *Clin Gastroenterol Hepatol.* 2009 May; **7**(5):530–6, 536. e1–2.

OWE-023 THE ASSOCIATION OF LIFETIME ALCOHOL USE WITH MORTALITY AND CANCER RISK: A PROSPECTIVE COHORT STUDY

¹Andrew Kunzmann*, ¹Helen Coleman, ²Wen-Yi Huang, ²Sonja Berndt. ¹Queen's University Belfast, Belfast, UK; ²National Cancer Institute, Bethesda, USA

10.1136/gutjnl-2018-BSGAbstracts.319

Introduction While current research is largely consistent as to the harms of heavy drinking in terms of both cancer incidence and mortality, there are disparate messages regarding the safety of light-moderate alcohol consumption which may confuse public health messages.

We aimed to evaluate the association between average lifetime alcohol intakes and risk of both cancer incidence and mortality.

Methods Population-based cohort study using data from 99 654 adults, aged 55–74 years participating in the U. S. Prostate, Lung, Colorectal and Ovarian (PLCO) Cancer Screening Trial. Cox proportional hazards models assessed the risk of overall and cause-specific mortality, cancer incidence (excluding non-melanoma skin cancer), and combined risk of cancer and death across categories of self-reported average lifetime alcohol intakes, with adjustment for potential confounders.

Results During 8 36 740 person-years of follow-up, 9599 deaths and 12 763 primary cancers occurred. Positive linear associations were observed between lifetime alcohol consumption and cancer-related mortality and total cancer incidence. J-shape associations were observed between average lifetime alcohol consumption and overall mortality, cardiovascular-related mortality and combined risk of death or cancer. In comparison to lifetime light alcohol drinkers (1–3 drinks per week), lifetime never or infrequent drinkers (<1 drink/week) as well as heavy (2–<3 drinks/day) and very heavy drinkers (3 +drinks/day) had increased overall mortality and combined risk of cancer or death. Corresponding hazard ratios and 95% confidence intervals for combined risk of cancer or death, respectively, were 1.09 (1.00 to 1.12) for never drinkers, 1.07 (1.03 to 1.12) for infrequent drinkers, 1.08 (1.01 to 1.16) for heavy drinkers, 1.20 (1.12–1.29) for very heavy drinkers.

Conclusions The study supports a J-shaped association between alcohol and mortality, which remains after adjustment for cancer risk. The results indicate that intakes between 1–5 drinks per week were associated with the lowest combined risk of cancer or death.

OWE-024 THE NATURAL HISTORY OF TERMINAL ILEAL RESECTION IN CROHN'S DISEASE

^{1,2}Jonathan Segal*, ^{1,2}Alan Askari, ^{1,2}Guy Worley, ^{1,2}Susan Clark, ^{1,2}Ailsa Hart, ^{1,2}Omar Faiz. ¹St Mark's Hospital, Harrow, UK; ²Department of Surgery and Cancer, Imperial College, London, UK

10.1136/gutjnl-2018-BSGAbstracts.320

Introduction CD can affect any part of the GI tract but the terminal ileum (TI) is the most common. The incidence of CD in Europe ranges from 0.5 to 10.6 cases per 1 00 000 person-years. The risk of surgery based on all population-based studies, at 1, 5, and 10 years after diagnosis of CD is 16.3% (95% confidence interval [CI], 11.4%–23.2%), 33.3% (95% CI, 26.3%–42.1%), and 46.6% (95% CI, 37.7%–57.7%), respectively. The risk of reoperation following a TI resection has been reported as 70% at 20 years based on a population of 1379 patients.

A recent study comparing laparoscopic ileal resection versus infliximab found that laparoscopic ileocaecal resection results in similar quality-of-life scores and is not associated with more serious adverse events. The long-term outcomes of those undergoing ileal resection has yet to be studied and may help identify risk factors for those that may require further operations.

Methods The Hospital Episodes Statistics dataset was used to identify all patients admitted to hospitals in England from 1997–2012. Time trends and multivariate logistic regression analysis was undertaken to determine factors associated with repeated resection.

Results 1 55 236 patients were identified as having a diagnosis of CD with a median follow-up was 92 months (IQR 43–143). Of these, 18.8% (29,257) underwent TI resection. Amongst this sub-group, 11.0% (n=3,101/29,257) required more than one resection. The total number of procedures performed was 32,889, of which 56.6% (n=18,622/32,889) were right hemicolectomy/ileo-caecal resection. The median time between resections was 41 months (IQR 15–74 months). There was no significant change in the number of procedures performed each year (p=0.693). Of the total population, 7.8% (n=12,173/155,236) had Infliximab therapy. At multivariate analyses, patients on Infliximab were more likely to undergo multiple resections (OR 1.47, 95% CI 1.41–1.53, p<0.001), possibly indicating severity of disease. Elderly patients (80 +years) were less likely to undergo surgical resection (OR 0.13, 95% CI 0.12–0.15, p<0.001). There was no differences in gender.

Conclusion Nearly one in five patients will require surgical intervention over a 15 year period for CD, of those undergoing TI resection only 11% of these will require further surgery. This is the largest population based study reporting the requirement for further surgery following TI resection and suggests that the reoperation rate is far lower than previously reported. The number of procedures performed has largely remained the same overtime suggesting that medical therapy has not altered the overall rates of further surgery following TI surgery in CD.