

Introduction Standards for Colorectal cancer (CRC) resection specimen histology reporting consider factors thought to have apparent significance for prognosis and further therapy. Whilst well validated for surgical resection, the increasing use of advanced endoscopic resection for polyps containing previously unknown early CRC presents challenges in interpretation of these factors. In addition to tumour budding, unfavourable tumour grade, and vascular invasion, Ueno *et al*[1] proposed parameters for width and depth of submucosal invasion as risk for adverse outcome. This study aims to analyse any association between pathological factors and outcome with endoscopic resection of early CRC.

Methods Retrospective review of all CRC removed endoscopically between March 2006 and March 2011. All endoscopic and surgical resection specimens were reviewed by two expert gastrointestinal histopathologists, with measurement of width and depth of submucosal invasion made. All follow up procedures, including radiology, were reviewed.

Results 35 cases were identified (24 males, 11 females, median age 69 years). All patients were alive after median follow-up period of 32 months; no residual/recurrent cancers were found in any patient managed with endoscopic therapy alone. Of the 12 patients who had further surgical intervention due to reported incomplete endoscopic resection on histology, none had residual carcinoma in the subsequent resection specimen. Three patients (8.6%) were found to have Dukes C1 cancers (all T1 N1 M0). These cancers were not associated with poor differentiation or lymphovascular invasion ($p = 0.546$) or tumour budding of low or high intensity ($p = 1.000$). The relationship between the width and depth of submucosal invasion and Dukes C1 did not reach statistical significance ($p = 0.096$), although these three cancers did fulfil Ueno criteria. Presence of lymph node metastases was associated with Haggitt level 4 ($p = 0.03$), but not with the presence of tumour at the excision margin ($p = 1.000$) in the subsequent surgical resection group.

Conclusion Our experience highlights the challenges in applying histopathological criteria to individual cases of early CRC resected via endoscopic therapy. Most patients underwent surgery for an unclear resection margin, however no residual cancer was present in the resection specimens and aside from a Haggitt level 4, found no other predictors of risk lymph node metastases. Suggestions for future studies include piloting a more minimally invasive approach, such as regional lymph node dissection in selected cases as well as studying biomarkers for refining risk stratification.

Disclosure of Interest None Declared.

REFERENCE

1. Ueno H *et al*. Risk factors for an adverse outcome in early invasive colorectal carcinoma. *Gastroenterology* 2004; 127: 385–394

PWE-042 COLONOSCOPY QUALITY MEASURES: EXPERIENCE FROM A WELSH BOWEL CANCER SCREENING CENTRE

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Introduction The NHS Bowel Cancer Screening Programme (BCSP) in England has demonstrated high quality colonoscopy [1]. Bowel Cancer Screening in Wales began in October 2008. We report results of first 3 years of screening in a single Welsh centre. Comparison is made with results from the English BCSP.

Methods Data was collected prospectively for participants undergoing FOBt testing and colonoscopy or flexible sigmoidoscopy between October 2009 and December 2011 in Cardiff and the Vale of Glamorgan. Quality indicators were calculated where appropriate.

Adenomas were confirmed after correlation with histopathology reports. with no adenoma double counted.

Results 42630 faecal occult blood test kits were returned from 91414 sent (46.6%), leading to 933 colonoscopies (795 index) and 82 flexible sigmoidoscopies (not index but mostly for therapeutic procedures) undertaken by four accredited screeners. Mean ADR per colonoscopist was 54.1%, mean number of adenomas per procedure (MAP) was 1.24 and the mean adenomas per positive procedure (MAP+) was 2.3, with a mean polyp retrieval rate of 98%. Mean midazolam dose was 2 mg (range 0.5–4 mg) and fentanyl 50mcg (range 25–100 cmg). Hyoscine n-butyl bromide was used in 34.5% of cases, with no increased ADR ($p = 1.000$). Only 2% of patients reported severe discomfort. Bowel cancer was detected in 69 individuals; a positive predictive value of colonoscopy (after positive FOBt) of 8.7%.

Abstract PWE-042 Table 1 Comparison of colonoscopy performance and complication between Cardiff and English BCSP

	Cardiff and Vale	English BCSP	p Value
Unadjusted caecal intubation rate	887/933 (95.1%)	32020/33635 (95.2%)	$p = 0.917$
Adenoma detection index round	422/795 (53.1%)	1334/2282 (46.3%)	$p = 0.009$
Adenoma detection prevalent round	54/79 (68.4%)	13216/28607 (46.2%)	$p = 0.0001$
Perforation	1/1025 (0.1%)	35/38168 (0.09%)	$p = 0.951$
Bleeding			
All	4/1025 (0.39%)	155/38168 (0.41%)	$p = 0.937$
Major	1/1025 (0.0.9%)	4/38168 (0.01%)	$p = 0.301$

Conclusion Our centre is providing high quality colonoscopy, with statistically significant higher rates of adenoma detection in both the index and prevalent rounds of screening colonoscopies compared to data from the English BCSP, and a low rate of adverse events given an increased need for endoscopic therapy. Measures of total adenoma detection (MAP and MAP+) also compare favourably. Further information is required to ascertain the clinical outcome measure of the missed cancer rate following a screening colonoscopy within the BCSP across the UK.

Disclosure of Interest None Declared.

REFERENCE

1. Lee TJW *et al*. Colonoscopy quality measures: experience from the NHS Bowel Cancer Screening Programme. *Gut* 2011; 61: 1050–7

PWE-043 THE MANAGEMENT OF LARGE SESSILE COLORECTAL POLYPS: EXPERIENCE OF A SINGLE WELSH SCREENING CENTRE

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Introduction Previous studies on large sessile colorectal polyps (LSCPs) suggest that management (Endoscopic vs Surgical) and outcomes (complication rates, incomplete resection, recurrence rates) may vary. The advent of the Bowel Cancer Screening Program (BCSP) provides opportunities to study this lesion subgroup systematically. We report the experience and outcomes of managing LSCPs in a single Welsh screening centre undertaking screening colonoscopy within an established local multidisciplinary discussion forum (colorectal surgery, endoscopy, radiology & histopathology).

Methods Outcome data was collected prospectively for BCSP participants with a benign adenoma greater than 20mm between October 2009 and December 2011 in Cardiff and the Vale of Glamorgan. Each patient was discussed at a multidisciplinary team meeting. Standard protocol for piecemeal EMR or histology suggesting