PTU-59 A QUALITY IMPROVEMENT PROJECT (QIP) TO REDUCE INAPPROPRIATE BIOPSIES AT ENDOSCOPY

¹Dinali Jayawardena*, ²Ioannis Koumoutsos, ¹Ben Warner. ¹Darent Valley Hospital, UK; ²Southend University Hospital, UK

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Introduction Histopathology costs represent a significant cost for endoscopy departments. Biopsies are useful when they can influence the management of our patients. Our aim was to demonstrate that application of a biopsy protocol could reduce costs and inappropriate use of resources.

Methods Analysis of 486 OGDs and 412 Colonoscopies was performed between April and May 2019. A biopsy protocol was produced using national guidelines (see Table 1). An assessment was made of the appropriateness of biopsy in each case. A price list of sample pots was obtained, and estimated costs were calculated to deduce the potential cost savings if guidelines had been adhered to over this 2-month period.

Results Of the 486 OGDs performed, biopsies were taken in 185 cases, of which 131 were appropriate (71%). An estimated £1816 may have been saved from reducing inappropriate biopsies. Of the 412 Colonoscopies performed, biopsies were taken in 266 cases, of which 190 were appropriate (71%). An estimated £2555 may have been saved from reducing inappropriate biopsies over this 2-month period.

Abstract PTU-89 Table 1 Sample of biopsy protocol for Oesophagus and Colon. Guidance was also created for Gastric/Duodenal biopsies

OESOPHAGUS
YES

6. Diagnosis and surveillance of Barrett's oesophagus ☐ Polyps, ulcers or mucosal abnormalities suspicious for neoplasia/infectious disease ☐ Clinical suspicion of eosinophilic oesophagitis (Biopsy 3 sites: upper, mid and lower. Use 1 pot)

NO

• Reflux oesophagitis unless ulcerated or suspicious for cancer/immunosuppression/pill oesophagitis • Ultrashort segment Barrett's • Inlet patch with normal mucosa

COLON
YES

☐ Suspected microscopic colitis (e.g. persistent watery diarrhoea, age >50, female, NSAID use) ☐ Suspected IBD (segmental biopsies in different pots for index colonoscopy) or Surveillance IBD (targeted biopsies using chromoendoscopy) ☐ Polyps with suspicious features and hyperplastic polyps ☐ Assessment of active/quiescent colitis (IBD, diverticular or segmental)

NO

• Normal colonoscopy without chronic diarrhoea • Random rectal biopsy for rectal bleeding • Terminal ileum biopsy to prove that the ileocaecal valve has been reached during colonoscopy unless mucosal abnormality is present

Conclusions Encouraging adherence to biopsy protocols reduces the number of inappropriate biopsies, pathology workload and costs. A learning event was held to disseminate the protocol and the results of this QIP to our endoscopists.

PTU-60 THE PREVALENCE OF SERRATED POLYPS IN A MULTI-ETHNIC SOCIETY IN THE UNITED KINGDOM

Mohamed G Eisa*, Roshini Kurian, Peter Wurm, Richard Robinson. University Hospitals of Leicester, Leicester, UK

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Introduction Leicestershire is the 16th most populous county in the United Kingdom. The estimated population is around 706,155¹. It has a multi-ethnic diverse group where non-white comprises 15% of its population¹. The majority of the non-white is South Asian.

Aim We aim to assess the prevalence of serrated polyps, defined as hyperplastic polyp (HP), sessile serrated lesion (SSL), traditional serrated adenoma (TSA) or mixed polyp², in this multi-ethnic group in patients attending for Bowel Cancer Screening (BCS) colonoscopy.

Methods We carried out a retrospective observational study of all serrated lesions (SLs) over a two-year period between 1st May 2018 to 30th April 2020.

Patients' demographic, polyp morphology & site were obtained from our Bowel Cancer Screening Programme (BCSP) database.

The self-reported ethnic origin of all individuals was recorded.

Non-serrated lesions (i.e tubular adenoma, tubulovillous adenoma and villous adenoma) were excluded from the study.

For statistical analysis we used Pearson Chi-square, independent sample T-test and one-way analysis of variance were used as appropriate. P value of 0.05 was considered statistically significant.

All analysis was conducted using SPSS version 26.

Results Over a 2 year-period, 2264 screening/surveillance colonoscopies were carried out, of which 493 patients had one or more SLs.

The mean age was 67.6 years, and 66.5% of patients were male.

The white Caucasian comprised 87.2% (n=430) of the study population while the Asian group was 12.8% (n=63).

The frequency of polyps as per morphology was as following: hyperplastic 82.4% (n=406), sessile serrated lesion 10.5% (n=52), traditional serrated lesion 1.2% (n=6) and mixed type 5.9% (n=29).

In the white group: 80.2% (n=345) of polyps were hyperplastic, 11.7% (n=50) were SSL, 1.4% (n=6) was TSA and 6.7% (n=29) were mixed type.

In the Asian group: 96.8% (n=61) of polyps were hyperplastic, 3.2% (n=2) were SSL and none was TSA or mixed type.

The mean number of SLs per individual was significantly higher in white Caucasian than in Asians, 1.53 (SD 1.10) vs. 1.23 (SD 0.49), (p= 0.001).

Between the two groups, the prevalence of SSL and the mixed type were higher in the white group (p= 0.001 and p=0.003, respectively).

On the one-way analysis, the mixed type was more prevalent amongst the different types of SLs (p=0.001).

The site of SLs in the colorectum, in order from highest to lowest, was as following: Sigmoid 53.6% (n=266), Rectum 25% (n=124), Ascending 23.5% (n=117), Transverse 20.9%

(n=104), Caecum 11.4% (n=57), Descending 7% (n=35), Hepatic flexure 4.4% (n=22), Rectosigmoid 3.8% (n=19), Splenic flexure 2.6% (n=13), Ileocaecal valve 0.2% (n=1) and Appendiceal orifice 0.2% (n=1).

Conclusions The prevalence of SLs as well as the number of polyps per individual was higher in the white group compared to Asian and much higher in men. Nevertheless, the number of colonoscopies in the Asian group was much lower; therefore, this might not fully reflect the demographic differences between the two groups.

SLs were higher in the left colon, particularly the sigmoid colon and were predominantly hyperplastic in nature.

Between the two groups, the prevalence of SSL and mixed type polyp was higher and was more prevalent in the white group.

Amongst the different types of SLs, the mixed type was more common.

REFERENCES

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PTU-61 THE SAFE INTERVAL FROM INDEX COLONOSCOPY TO POLYPECTOMY

¹Buraq Abdul-aema*, ^{1,2,3}Andrew Cole, ^{1,2,3}Said Din. ¹Royal Derby Hospital, UK; ²Consultant Gastroenterologist; ³Honorary Assistant Professor- University of Nottingham

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There is no evidence about the safe timing of Polyp Endoscopic Mucosal Resection (EMR) after detection at diagnostic colonoscopy. The aim was to help identify a safe interval from the diagnostic colonoscopy to planned therapeutic polypectomy.

Methods All symptomatic and bowel cancer screening program (BCSP) patients referred for a planned therapeutic polypectomy at our centre in 2019 were retrospectively analysed. Data was collected on the time interval between polyp detection and removal, SMSA (site, morphology, size and access) level and differences in histology if the polyp was biopsied at detection and EMR specimen.

Results 120 patients were included; 57 in the BCSP (37 males, 20 females), median age 66 years and 63 in the symptomatic group (39 males, 24 females), median age of 70 years.

120 polypectomies were performed (mean size= 28.7 mm), 24 polyps had a biopsy taken prior to polypectomy. 53 (44%) polyps were classified as SMSA 2, 50 (42%) SMSA 3 and 17 (14%) SMSA 4 (Figure 1).

Median time interval for polypectomy was 9 days for BCSP and 13.5 days for symptomatic patients.

3 patients who had a polyp biopsy in the BCSP group (1 low grade dysplasia (LGD) and 2 high grade dysplasia (HGD), all SMSA 4 were found to have adenocarcinoma after polypectomy. The time interval from biopsy to polypectomy was 14 days for the LGD case and 19 and 26 days for the HGD cases.

2 patients who had a polyp biopsy in the symptomatic group (2 LGD, SMSA 3 and 4) were found to have adenocarcinoma after polypectomy. The time interval to polypectomy was 25 and 119 days respectively.

The patient with 119 days waiting time attended at 50 days from the index colonoscopy, but due to comorbidities

Abstract PTU-61 Figure 1 The number of the polyps presented by the SMSA level

and high INR was deferred. In the remaining 19 cases, there was no change in histology with a time interval of 6 -80 days to polypectomy.

SMSA level 2 or 3 polyps were removed in a mean time of 13.7 days (range 0-68 days). 4/17 (23.5%) polyps with SMSA level 4 were found to have adenocarcinoma after polypectomy, time interval to polypectomy was 14-25 days.

Conclusions These data show that a significant proportion of complex polyps may contain a cancer focus not recognised on prior endoscopy or biopsy. Polypectomy therefore should not be delayed.

PTU-62 MICROSCOPIC COLITIS: FINDING THE SWEET SPOT

Sun Mi Ha*, Flora Kokwaro, Nicola Grasso, Zillah Cargill, Olaolu Olabintan, Imogen Sutherland, Yazan Haddadin, Elizabeth Harrod. *Get Linked to KSS, Gastroenterology Trainee Network, UK*

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Introduction Microscopic colitis (MC) is a prevalent and treatable cause of chronic, non-bloody, watery diarrhoea. In MC, the colon is usually macroscopically normal therefore the BSG and European guidance call for right and left colon biopsies to be taken for histological examination to make the diagnosis. There is no established guidance on biopsy protocol.

This retrospective, multi-centre study looked at our biopsy practice and whether there is a pattern that leads to higher diagnostic yield for diagnosis of MC.

Methods The endoscopy reporting systems in six trusts across Kent, Surrey, Sussex and Cambridge were searched for all colonoscopies in patients aged 18 or over with the indication chronic diarrhoea performed between 1 January 2020 and 31 March 2020. All diagnosis of cancer or macroscopic inflammatory disease were excluded. The endoscopy and histology reports were analysed to see how many biopsies were taken and their histological diagnosis.

Results 363 reports were analysed. The age range was 18 to 90. Male to female ratio was 1:1.8. Biopsies were taken from both the right and left colon in 83.5%. Biopsies of the rectum were taken in 10.5%.

The number of biopsies taken ranged from 0 to 17, most commonly taken as 4 right and 4 left colon biopsies (18.5%). The most common distribution was random right and left colon biopsies (22%) followed by colonic series biopsies* (9.6%).