steroids therapy, the second patient underwent surgery for a malignant stricture and the third patient had enteroscopy and removal of the capsule; biopsies of the stricture were inconclusive. The overall cohort DY for all indications was 39% (n=377/958).

**Conclusions** This is the largest series from a DGH in England. Our data has shown that CE is safe, non-invasive and feasible in a district hospital setting. It has a good DY, acceptable to patient and allows adequate look at the small bowel. Recommendations: Despite the major role of CE in GI investigation, there is a lack of structured training. We recommend formal accreditation and training to be added to the Gastroenterology advance training curriculum.

**PTU-074**  
**MICROSCOPIC COLITIS: INCIDENCE AND BIOPSY PATTERN IN A DISTRICT GENERAL HOSPITAL IN ENGLAND**

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10.1136/gutjnl-2018-BSGAbstracts.453

**Introduction** Microscopic colitis (MC) is characterised clinically by chronic watery diarrhoea and usually by normal-looking colonic mucosa on endoscopy.1 This creates controversy regarding the role of routine mucosal biopsy protocol. Despite an increasing incidence, understanding and awareness of MC remain low. The European Microscopic Colitis Group (EMCG) established a series of recommendations to enhance awareness about MC.2

**Aim & methods** We aim to evaluate the incidence of MC in our centre; a district general hospital serving a population of 2 50 000 in North east England. We retrospectively retrieved, reviewed and analysed data from all lower gastro-intestinal (GI) endoscopy reports and colonic biopsies histology reports for patients diagnosed with MC between January 2010 and December 2016. We assessed demographics, indications, endoscopy and biopsy histology reports of the cohort of patients with established MC.

**Results** 145 patients were identified. Three patients were excluded due to unavailable endoscopy reports leaving 142 eligible patients included in this service evaluation. The annual incidence rate of MC has increased by more than 5 folds over the six years period [Figure 1]. Females predominated the cohort with 93 patients (65.5%) with a mean age of 61 years (range 19–85). The mean age for males was 60 years (range 19–88). 137 patients underwent colonoscopy, while only five patients had flexible sigmoidoscopy. Indications were: chronic diarrhoea 83.1%(n=118), altered bowel habits 12.7%(n=18), anaemia 0.7%(n=1), per-rectal bleeding 0.7%(n=1), and Inflammatory Bowel Disease surveillance 2.8%(n=4). Endoscopy was normal in 85.2%(n=121), while 6.3%(n=9) of patients were found to have area of inflammation. Terminal ileal biopsies were performed in 12.7%(n=18) and were all negative.

Majority of patients (55.6%, n=79) were found to have lymphocytic colitis LC, while Collagenous colitis was demonstrated in 42.3%(n=60) of patients and only 2.1%(n=3) had a mixed histological picture of LC and MC reported. 89 patients (63%) had right, left and recto-sigmoid mucosal biopsies while the rest had random mucosal biopsies.

**Conclusion** Data from our centre showed annual increase diagnosis of MC. TI biopsy were all negative and therefore inconclusive in diagnosis of MC. In view of the lack of clear diagnostic biopsy protocol in normal lower GI endoscopy in patients presenting with chronic diarrhoea, either random colonic or segmental mucosal biopsies can be done to look for MC.

**REFERENCES**


Abstracts

**PTU-076 USING GOOGLE SEARCH TREND DATA TO ASSESS PUBLIC INTEREST IN UPPER GI CANCER SYMPTOMS**

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10.1136/gutjnl-2018-BSGAbstracts.455

**Introduction** Search engine data has been used to predict disease outbreaks based on search volumes for symptoms. Trend data can also assess information-seeking behaviour for cancer symptoms.

‘Be Clear on Cancer’ (BCOC) for upper GI cancers ran 26/1/15–28/2/15 and resulted in increased two week wait (2ww) OGD referrals. We use Google search data to identify information-seeking behaviour for symptoms of upper GI cancers and corresponding local 2ww referral patterns in response to BCOC.

**Methods** Search data from 10/2/13–3/2/18 for: ‘heartburn’, ‘indigestion’, ‘reflux’ and ‘heartburn AND cancer’ was extracted from Google ‘Trends’ and ‘Google Adwords’. Google ‘Trends’ normalised weekly search traffic to a ‘relative search volume’ (RSV) index between 0 (<1% of the peak weekly search volume) and 100 (equivalent to the highest weekly search volume during the study period).

Data was compared to monthly 2ww referrals for upper GI cancers at our centre over the study period. Lower GI cancer referrals were used as a control.

**Results** A mean annual increase in weekly RSV (compared to the annual mean RSV) for the terms ‘heartburn’ and ‘indigestion’ in the last week of December annually (from 2013 to 2017) of 67% and 60% respectively (figure 1). In the last week of January 2015, there was also a peak in RSV for ‘heartburn’ of 73%, corresponding to BCOC. This peak was higher than the Christmas 2014 increase (56%) and not replicated in the study period.

**Conclusions** Telephone and virtual clinics result in earlier treatment decisions for IBD patients and give quantifiable cost savings as part of an IBD pathway at a DGH. By increasing virtual clinics and encouraging patient autonomy, we can aim to improve the NICE quality standard of seeing new IBD patients within 4 weeks of referral. Improving autonomy over services for both clinician and patient can allow for more efficient IBD care.

**PTU-077 A PILOT INTERNATIONAL SURVEY OF COLONOSCOPY RELATED INJURY IN COLONOSCOPISTS**

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10.1136/gutjnl-2018-BSGAbstracts.456

**Introduction** Colonoscopy is physically demanding for endoscopists and for patients. Repetitive movements during colonoscopy can lead to overuse injuries. Our aim is to explore the
prevalence and range of colonoscopy-related musculoskeletal injuries (CRI) in endoscopists.

**Methods** A cross-sectional electronic survey of 1825 endoscopists was made. The sample was comprised of members of British Society of Gastroenterology, European Society of Gastrointestinal Endoscopy and National Nurse Endoscopy Group. The survey comprised 20 questions. These included: endoscopists’ workload, level of experience and their perceived CRIs. All endoscopists who perform colonoscopy independently were included in the analysis.

**Results** Initial results include 337 completed questionnaires out of 1825 (18.4%). Of those, 319 (94.5%) participants are fully independent in colonoscopy, 254 out of 319 (79.6%) have experienced musculoskeletal injuries. These were reported as either possibly (n=143, 46.7%) or definitely (n=90, 29.4%) related to colonoscopy.

Factors that were significantly associated with higher rates of CRI: >6 hours per week (equivalent to 2 or more lists/week) (p=0.0001), >5000 life-time number of colonoscopies performed (p=0.0002), >150 procedure performed per year (p=0.0001). Female endoscopists are also at a significantly higher risk of CRI and more likely to require time off-work (p=0.0001).

Commonly injured areas were: lower back (n=95, 30.45%), neck (n=90, 28.85%) and left thumb (n=80, 25.64%). 95 (30.35%) of injured endoscopists applied some treatment modalities: physiotherapy (n=233) (49/70), medications (n=26) and surgery (n=11).

**Conclusions** From our initial results, a significant proportion of endoscopists experience CRI. Higher prevalence of CRI was significantly associated with >5000 total life-time colonoscopies, >6 hour/week performing colonoscopy, >150 procedure/year and female gender. These results highlight the need to recognise CRI as an important issue and to adopt preventative strategies routinely in the future.

### Abstract PTU-078 Table 1

<table>
<thead>
<tr>
<th>Factor</th>
<th>Possible/Definite CRI (n=233)</th>
<th>No CRI (n=73)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>148/44 (64.6)</td>
<td>59</td>
<td>0.0001</td>
</tr>
<tr>
<td>Female</td>
<td>84/26 (31.7)</td>
<td>14 (4.4)</td>
<td></td>
</tr>
<tr>
<td>Colonoscopy/year</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;150</td>
<td>264/82.8</td>
<td>189/60.2</td>
<td>58</td>
</tr>
<tr>
<td>&gt;150</td>
<td>53/17.2</td>
<td>35/39.8</td>
<td>58</td>
</tr>
<tr>
<td>Life-time total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;5000</td>
<td>119/37.3</td>
<td>89/29.7</td>
<td>47</td>
</tr>
<tr>
<td>&gt;5000</td>
<td>200/62.7</td>
<td>144/45.1</td>
<td>47</td>
</tr>
<tr>
<td>Hour/week</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;6</td>
<td>273/85.6</td>
<td>198/62.1</td>
<td>62</td>
</tr>
<tr>
<td>&gt;6</td>
<td>46/14.4</td>
<td>34/10.7</td>
<td>62</td>
</tr>
</tbody>
</table>

97/125 (77.6%) QSs were being actively audited (within 12 months), increasing to 109/125 (87.2%) over the past 5 years. Currently 55/125 can be audited electronically, 24/125 require notes review and 46/125 involve a combined approach. Compliance was poor for QSs needing review (49/70), but increased significantly with electronic audit data (51/55; p=0.001) (figure 1).