**PMO-259**

PREDICTING FAILURE OF MEDICAL MANAGEMENT IN IBD PATIENTS: DATA FROM THE 3RD ROUND UK IBD AUDIT

1G Walker,* 2R Greenwood, 3I Arnott, 4C Probert; on behalf of UK IBD Audit Steering Committee.

Introduction The value of admission clinical parameters and therapies to predict inpatient treatment failure is poorly defined. We used data collected in the 3rd Round UK Inflammatory Bowel Disease (IBD) Audit to determine whether number of previous hospital admissions with IBD and outpatient drug therapy predicted surgery after a failure of medical treatment.

Methods Retrospective patient data from 198 UK sites were collected using an online form with up to 40 patients per site. Inclusion criteria were age >17 years, admission date from September 2010–August 2011 and a discharge diagnosis of IBD. Relevant ICD10 and OPCS codes were provided. Data items collected included number of admissions to hospital with IBD in the previous 2 years and outpatient drug therapy on admission. Our outcome was surgery due to treatment failure and a logistic regression model was fitted using both forward and backwards stepwise modelling to find independent predictors.

Results There were two statistically valid models which could be used to predict surgery. In both models the number of admissions in the last 2 years was a statistically significant predictor of surgery. Two admissions doubled the risk (OR 1.97, 95% CI 1.17 to 3.32) and three or more admissions increased it further (OR 2.62, 95% CI 1.17 to 3.32). In one model the number of different drugs being taken (corticosteroids (CS), immunosuppressives (IS), anti-TNF (aTNF)) was a predictor and in the other use of CS and the use of aTNF were both significant independent predictors instead of number of drugs. Other treatments were looked at but were not independent predictors. Taking one drug on admission was associated with a doubling of risk (OR 1.95, 95% CI 1.15 to 3.24), two drugs trebled (OR 3.01 95% CI 1.78 to 5.10) and three or more quadrupled (OR 4.10 95% CI 2.08 to 8.05) the risk. Alternatively CS doubled the risk and aTNF trebled the risk with OR 1.73 and 2.96 respectively.

Conclusion This data shows that the number of previous admissions to hospital can be used as an easy prognostic indicator to better inform patients of their risk of requiring surgery for a failure of medical management after admission to hospital. In addition there is separation between the risk of surgery and taking CS and aTNF, this probably reflects disease severity, but might also be used to guide patient management. Further analysis is being carried out to find other predictors.

Abstract PMO-259 Table 1 Model for predicting risk of surgery

<table>
<thead>
<tr>
<th>No drugs (p&lt;0.001)</th>
<th>OR</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 drug</td>
<td>1.93</td>
<td>1.15 to 3.27</td>
</tr>
<tr>
<td>2 drugs</td>
<td>3.01</td>
<td>1.78 to 5.10</td>
</tr>
<tr>
<td>≥3 drugs</td>
<td>4.09</td>
<td>2.08 to 8.05</td>
</tr>
</tbody>
</table>

No admissions (p<0.001) 1.00 Reference group

| 1 admission | 1.31 | 0.83 to 2.07 |
| 2 admissions | 1.97 | 1.17 to 3.32 |
| 3 admissions | 2.62 | 1.61 to 4.26 |

**PMO-260**

BONE PROTECTION IS UNDER USED IN IBD PATIENTS: DATA FROM THE 3RD ROUND UK IBD AUDIT

1G Walker,* 2I Arnott, 3C Probert; on behalf of UK IBD Audit Steering Committee.

Introduction BSG guidelines recommend that supplementation of calcium and vitamin D is given when systemic steroid use is necessary and that co-administration of bisphosphonates with steroids is given for patients aged over 65 years or with known osteoporosis/osteopenia.1 Data collected in the 3rd Round UK IBD audit were used to determine whether these guidelines were followed.

Methods Retrospective patient data from 198 sites of up to 40 patients per site were collected using an online form. Inclusion criteria were age >17 years at the date of admission with a discharge diagnosis of IBD from September 2010 to August 2011. A list of relevant ICD10 and OPCS codes was provided to aid patient identification. Data items collected in UC and CD included the number of patients discharged taking corticosteroids (CS) and bone protective agents. In CD only data were collected on CS and bone protective agent use in the outpatient setting. Statistical analysis used Fishers exact test to generate two-tailed p values.

Results Bone protective agents are underused. Bone protective agents were more likely to be used in UC patients discharged on steroids than in CD (UC: 66.2%, 1443/2181; CD: 58.7%, 1022/1742, p = 0.021). Among 600 CD outpatients prescribed steroids for >3 months in the previous year 404 (67.3%) also received bone protection; this was not significantly different to inpatient care of CD patients (p = 0.07). Of 600 outpatients who had received steroids for over 3 months in the last year 132 (22.2%) had a DEXA scan.

Conclusion Compliance with BSG guidelines regarding the use of bone protection for patients taking steroids is poor. Only 2/3 of IBD inpatients discharged on steroids were given bone protective agents. This figure is similar to patients treated in the inpatient setting. Approximately 1/5 CD patients who received a course of steroids in the outpatient setting also had a DEXA scan. Unfortunately further information was not available in order evaluate whether these patients were risk stratified for fragility fractures. It remains unclear why bone protection was significantly better prescribed in UC patients than CD. Further analysis of this data with logistic regression is needed in order to see whether other factors are influencing these results. Clinicians are further encouraged to prescribe bone protection for these patients. Bone protective measures must be promoted and hopefully the culture of prescribing can be changed for the better.

Competing interests None declared.

REFERENCE


**PMO-261**

IS CROHN'S DISEASE IN THE UK BEING UNDER TREATED? DATA FROM THE 3RD ROUND UK IBD AUDIT

1G Walker,* 3I Arnott, 3C Probert, on behalf of UK IBD Audit Steering Committee.

Introduction The British Society Gastroenterology (BSG) guidelines for Inflammatory Bowel Disease (IBD) advise escalating treatment

Gut July 2012 Vol 61 Suppl 2 A181