MANAGEMENT OF IRRITABLE BOWEL SYNDROME

Supporting GPs to help patients with IBS

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Somerset Partnership NHS Trust
Patient Quality of Life

“I want to reduce or preferably eliminate the pain, cramps and sickness. I want to be able to get to the toilet in time and regain some confidence about this.…

I want to stop feeling tired, miserable and anxious about my future health.”
Costs to the NHS

IBS patients incur 51% more total costs per year than a non-IBS control group \(^1,2\)

1. Maxion-Bergemann et al. (2006), Pharmacoeconomics: 24 (1); 21-37
2. Longstreth GF et al. (2003), Am Journal of Gastroenterology: 98 (3); 600 - 607
“…frustration over the present lack of treatment options for IBS patients and I often see patients 3 to 10 times before feeling compelled to refer the patient to secondary care.”  Dr Buckle
Secondary care unnecessary costs

14.3% non red flag referrals into secondary care gastroenterology for IBS

Figures thanks to Emma Greig, Consultant Gastroenterologist at Musgrove Park Hospital, Taunton
“Early referral to a dietitian may lead to a reduction in future costs of care for people with IBS”

Dietetic intervention was seen as a cheap and effective first line treatment
Dietitians are uniquely placed to help patients with IBS

Registered Dietitians (RDs) are the only health professionals qualified to assess, diagnose and treat dietary and nutritional problems. They are regulated by law and registered with the HCPC.
In 2010 the low FODMAP diet arrived in the UK....
Dietetic-Led Primary Care Gastroenterology Clinic

Commissioned in 2012 by CCG for Somerset Partnership NHS Trust as a service for primary care as an alternative to referral into secondary care
First question must be....

“Is it IBS?”
Gastrointestinal symptoms

- Pain & Discomfort
- Bloating
- Wind
- Reflux
- Diarrhoea/Constipation
- Nausea
What we see in reality?

Dietetic Treatment

Coeliac Disease

Gluten Sensitivity

IBS

Gastrointestinal Allergy
IBS Subgroups - a concept…

Type of diets used

Coeliac Disease
Gluten free diet

Gluten Sensitivity
Gluten free diet

IBS
Lifestyle
Low FODMAP diet

Gastrointestinal Allergy
Dairy +/- or Soya Elimination diet

Dietetic Treatment
OUTCOMES
Patients seen for initial appointment n=666 between 1st May 2014 to 14th November 2016

- Completed diet therapy: 426
- Continuing diet therapy: 31
- 18% DNA F/U (605/109): 109
- 5.6% No paperwork completed (605/34): 34
- 0.8% Did not follow diet (605/5): 5
- No F/U required: 61
Characteristics n=426

Mean Age 48.6

83% Female

17% Male
Type Diets Used n=426

- 68% Low FODMAP Diet
- 15% LFD & other diet
- 3% Gluten Free
- 5% Dairy Free
- 2% Dairy & Soya Free
- 2% Elimination Diet
- 5% Other
Mean symptom severity scores n=426
Wilcoxon signed rank test p values <0.05 for all symptoms

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Mean Symptom Severity Score</th>
<th>Pre Dietary Intervention</th>
<th>Post Dietary Intervention</th>
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</thead>
<tbody>
<tr>
<td>Abdominal Pain</td>
<td>1.86</td>
<td>1.05</td>
<td></td>
</tr>
<tr>
<td>Bloating</td>
<td>1.85</td>
<td>1.12</td>
<td></td>
</tr>
<tr>
<td>Wind</td>
<td>1.72</td>
<td>1.01</td>
<td></td>
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<tr>
<td>Belching/Burping</td>
<td>0.98</td>
<td>0.61</td>
<td></td>
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<tr>
<td>Gurgling</td>
<td>1.50</td>
<td>0.86</td>
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<tr>
<td>Urgency</td>
<td>1.73</td>
<td>0.99</td>
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<tr>
<td>Incomp. Evacuation</td>
<td>1.44</td>
<td>0.88</td>
<td></td>
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<tr>
<td>Nausea</td>
<td>0.91</td>
<td>0.51</td>
<td></td>
</tr>
<tr>
<td>Heartburn</td>
<td>0.63</td>
<td>0.34</td>
<td></td>
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<tr>
<td>Acid regurgitation</td>
<td>0.62</td>
<td>0.37</td>
<td></td>
</tr>
<tr>
<td>Tiredness</td>
<td>1.97</td>
<td>1.42</td>
<td></td>
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</table>
Percentage improvement in individual symptoms n=426

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Improvement (%)</th>
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<tbody>
<tr>
<td>Abdominal Pain 275/404</td>
<td>68</td>
</tr>
<tr>
<td>Bloating 252/393</td>
<td>64</td>
</tr>
<tr>
<td>Wind 243/393</td>
<td>62</td>
</tr>
<tr>
<td>Belching/Burping 172/279</td>
<td>62</td>
</tr>
<tr>
<td>Gurgling 227/361</td>
<td>63</td>
</tr>
<tr>
<td>Urgency 239/358</td>
<td>67</td>
</tr>
<tr>
<td>Incomp. Evacuation 293/358</td>
<td>61</td>
</tr>
<tr>
<td>Nausea 165/252</td>
<td>65</td>
</tr>
<tr>
<td>Heartburn 128/179</td>
<td>72</td>
</tr>
<tr>
<td>Acid regurgitation 110/172</td>
<td>64</td>
</tr>
<tr>
<td>Tiredness 199/392</td>
<td>51</td>
</tr>
</tbody>
</table>
Validated global symptom satisfaction question n=426

“Do you currently have satisfactory relief from your gut symptoms”

Pre Dietary Intervention: 8%

Post Dietary Intervention @ 8 wks: 61%
What effect has dietary intervention had on your quality of life?

- Improved QOL: 75%
- Unchanged QOL: 22%
- Deteriorated QOL: 2%

n=426
Stool consistency n=426

Pre dietary Intervention
- Mixed Stools: 34%
- Loose Stools (type 6 & 7): 24%
- Hard Stools (type 1 & 2): 8%

Post Dietary Intervention
- Mixed Stools: 23%
- Loose Stools (type 6 & 7): 6%
- Normal Stools (type 3, 4 & 5): 62%
- Hard Stools (type 1 & 2): 9%
With this IBS pathway in Somerset secondary care referrals have been reduced from 14% to 9% in the first year.
“I am thrilled to say my life has improved significantly. I have eliminated dairy and soya from my diet completely and have challenged all the other foods introducing most back into my diet.”

“I am much healthier, now weigh 57kg and have plenty of energy! After monitoring my general health and blood pressure, my GP took me off all medication. All extremely good news!”
Long term success of dietary treatment

- 70% continued to have satisfactory relief 6-18 months later
- Encourages long-term self-management
- Cost implications nationally

O'Keeffe et al. 2017
Neurogastroenterology & Motility
In 2015, “Having a dedicated community based service that provides appropriate assessment, definitive diagnosis, and a comprehensive treatment plan, is greatly valued by GPs trying to manage these patients.”
Low FODMAP Diet for Irritable Bowel Syndrome (IBS)

Information for patients

The Low FODMAP diet is extremely effective in improving the symptoms in approximately 75% of patients with IBS. However it is a complex diet to tackle without appropriate support and guidance. Careful implementation of a low FODMAP diet is needed to ensure that the diet is effective and nutritionally adequate. Education should be provided by a FODMAP trained dietitian.

What is the Low FODMAP Diet?

Some carbohydrates may contribute to IBS symptoms. These carbohydrates are called Fermentable Oligo-saccharides, Di-saccharides, Mono-saccharides, And, Polyols, also known as FODMAPS.

Please note that only these carbohydrates are a problem and not all carbohydrates.

These FODMAP carbohydrates are not absorbed in the small intestine and so create food residue. This food residue passes out of the small intestine and into the large intestine (colon) where it is then fermented by the bacteria in this area of the gut.

The fermentation of this food residue in the colon can cause gas producing symptoms such as wind, bloating, abdominal pain and can alter stool consistency resulting in diarrhoea.

Summary

FODMAPs are dietary carbohydrates, which are poorly absorbed in the small intestine and fermented in the large intestine triggering symptoms in sensitive individuals.

Dietary Intervention

- Dietary intervention involves the strict elimination of FODMAP foods for an 8 week period.

- FODMAP containing foods are then reintroduced to identify which particular FODMAPs you are most sensitive to. Different individuals will be more sensitive to certain FODMAPs.

- Foods are often well tolerated after this period of elimination and the majority of individuals will not need to be too restrictive for the long term.

Useful Resources

The low FODMAP diet should be followed with the support of a FODMAP trained dietitian to help prevent a nutritionally deficient diet. However, if you would like further information about the diet before seeing a dietitian, some reliable resources include:

- Smartphone App - The ‘Food Maestro FODMAP’ smartphone app (annual cost £3.99)

- YouTube Videos
  - The FODMAP Grand Tour Down Under: IBS relief, video by Monash University - https://www.youtube.com/watch?v=z_1H4809Sc
  - King’s College London YouTube videos - Starting the low FODMAP diet - https://www.youtube.com/watch?v=3PPhoa20D64
  - Stage 1 Restriction - https://www.youtube.com/watch?v=LQ7huCIcKzI
  - Stage 2 Remindvention - https://www.youtube.com/watch?v=SVlUqgh7t8
  - Stage 3 Personalisation - https://www.youtube.com/watch?v=VRKH4JLRds

- Twitter Accounts App - @MonashFODMAP and @FoodMaestroUK

- Facebook Accounts App - MONASHFODMAP and FoodMaestro

Is this an allergy diet?

No. IBS is caused by irregular gut function, e.g. bacteria fermenting food residue when there are too many FODMAPs in the diet. IBS is also called ‘functional’ gut syndrome: IBS sufferers can often tolerate small to moderate amounts of the suspect foods.

Food allergy, on the other hand, involves the immune system and the body may react to tiny amounts of the suspect food. The immune system is not involved in IBS, and therefore IBS is not an ‘allergy’ to foods.
Improving evidence-based management of irritable bowel syndrome across Somerset

Organisation: Somerset Gastroenterology Flexible Healthcare Team
Date of submission: June 2015

Despite the 2008 publication of NICE clinical guideline 61 aiming for appropriate management of irritable bowel syndrome (IBS) within primary care, its recommendations were not being followed in Somerset. In 2011, our multidisciplinary group formed from representatives from primary and secondary care elected to use this as an opportunity to review current arrangements for diagnosis, investigation and management and look to implement a more patient-focused solution. By identifying cost savings from reducing referrals to secondary care for patients of 16–45 years old with no red flag symptoms and likely IBS, and limiting investigations to those with a likely inflammatory pathology, we were able to fund faecal calprotectin testing for general practice and a specialist dietetic-led gastroenterology clinic using dietary intervention for patients with intractable symptoms including use of the low FODMAP diet.

Guidance the shared learning relates to: Irritable bowel syndrome in adults: diagnosis and management of irritable bowel syndrome in primary care (CG61)
Quality and Productivity case study

Publisher  Somerset Flexible Healthcare Gastroenterology Group
Publication Date  16 Jul 2016
Publication Type

Description

In 2011, a multidisciplinary group including representatives from primary and secondary care assessed the implementation of NICE’s IBS guidance (NICE guideline CG61) within Somerset. They examined current arrangements for diagnosis, investigation and management of IBS and explored a more patient-focused solution. The group identified cost savings by reducing outpatient activity and investigations within secondary care gastroenterology clinics (in Taunton and Somerset NHS Foundation Trust and Yeovil District Hospital NHS Foundation Trust) of people aged 16–45 with no red flag symptoms and likely IBS. The cost savings were used to fund faecal calprotectin (FC) testing through GPs and a specialist gastroenterology dietetic community service.
Winners of NICE Award 2016
Using best practice to create a pathway to improve management of irritable bowel syndrome: aiming for timely diagnosis, effective treatment and equitable care

Marianne Williams,1 Yvonne Barclay,1 Rosie Bennenyworth,2 Steve Gore,3 Zoe Hamilton,3 Rudi Matulié1,4 Iain Phillips,3 Leah Sease,1,4 Kate Staveley,1 Steve Thole,1 Emma Greig1

ABSTRACT

Background Irritable bowel syndrome (IBS) costs the National Health Service almost £12 million per annum. Despite national guidelines advising primary care management, these have failed to stem secondary care referrals of patients with likely IBS for unnecessary and costly assessment and investigation without necessarily achieving resolution of their symptoms.

Methods In 2011, an integrated team from primary and secondary care developed a business case using baseline data to create a Somerset-wide IBS pathway using Clinical Commissioning Group funding. This provided face-to-face general practitioner (GP) education, developed a diagnostic pathway and funded several sub-specialist (FC) seeing to exclude inflammatory pathology for patients aged 16–45 years with likely IBS and no alarm symptoms. For those with FC £50, we provided a management algorithm and community-based dietary treatment. Audit results measured uptake and outcomes from FC testing, changes in patterns and costs of new patients reviewed in gastroenterology outpatients and diabetes IBS treatment outcomes.

Results The proportion of new patient skin used reduced from 14.3% to 8.7% over 10 months while overall costs reduced by 25% for patients with no alarm symptoms and likely IBS aged 16–45 years. FC results confirmed research findings with no inflammatory pathology, if FC £50, over 2 years. 63% of patients had satisfactory control of their IBS after specialist dietetic input with 74% reporting improved quality of life.

Conclusions The combination of GP education, providing diagnosis and management pathways, using FC to exclude inflammatory pathology and providing an effective treatment for patients with likely IBS appeared successful in our pilot. This proved cost-effective, reduced secondary care involvement and improved patient care.

INTRODUCTION

Irritable bowel syndrome (IBS) is a chronic and debilitating condition, which places a significant burden on the National Health Service (NHS), both in terms of financial cost and strain on primary and secondary care.1,2 The total attributable cost of IBS in the UK was almost £12 million per annum in 2012–2013. Despite the National Institute for Health and Care Excellence (NICE) and British Society of Gastroenterology guidelines recommending that IBS management should take place within primary care,2,3 a significant proportion of patients aged 16–45 years with likely IBS are still referred to secondary care despite a low probability of pathology. Research suggests that general practitioners (GP) still see IBS as a diagnosis of exclusion often due to uncertainty about diagnosis and in the belief that negative diagnostic tests are useful.4,5 Overall demands for inappropriate and outpatient diagnostic endoscopies are increasing annually.6 Hence, better GP education around diagnosis of IBS within primary care, along with an effective management pathway, should lead to direct
How are we further innovating this service?
Group Sessions in Somerset...

We see patients in small group sessions run by specialist gastroenterology dietitians. Please be aware that you may need to wait substantially longer for a one to one appointment.

I would prefer a one to one as I’m embarrassed by my symptoms, but if no alternative would do a group.

Once completed, please return this questionnaire to the Dietetics Department in the enclosed envelope. Thank you.
Patient Webinars

Here is an easy way to find out more about IBS

by joining an online ‘webinar’
you can listen to expert advice
and will be able to ask an
award winning dietitian
questions about IBS
from the comfort of
your own home.

How?
Just send an email to
gastro.webinars@nhs.net
requesting an invitation to the
next webinar on your own
computer, tablet or mobile phone.

These online webinars are ...
- Easy to use
- Evening sessions 7 - 8pm
- No travel or parking involved
- No one except the dietitians will know who you are
- You can ask questions anonymously
- Handouts available with latest information
- Save the session and REWATCH at your leisure

Somerset Partnership NHS
NHS Foundation Trust

for all IBS patients delivered by our multi-award winning
Somerset dietetic team at gastro.webinars@nhs.net
Webinar downloads

- NICE approved British Dietetic Association First Line IBS Advice
- FODMAP information sheet
- Constipation advice
- Lactose intolerance advice
- Self referral form
Data from webinars so far
The Somerset IBS Pathway

IBS patients GP → community dietetics for first line advice
Webinar or literature

Intractable IBS patients self refer to Specialist 1-1 dietetic gastro service

61-74% improve discharged

Don’t improve → GP If available refer for CBT Hypnotherapy Medication OR Secondary care
Summary

- IBS significantly affects patient QOL
- IBS is costly to the NHS in GP time, medications and investigations
- Dietitians are uniquely placed to help IBS patients
- Dietetic treatment is effective with both symptoms and QOL
- Dietetic treatment shows long term success in patient management
- GPs value dietetic specialist clinics for IBS
- Technology can potentially be used to reach more patients
THANKS
FOR
LISTENING