Change in Bowel Habit: Investigating, Treating and Referring.

Dr Joel Mawdsley
Consultant Gastroenterologist
3% primary care visits

30% secondary GI referrals

"I'm afraid that your irritable bowel syndrome has progressed. You now have furious and vindictive bowel syndrome."
FOCUS

- Case based – common clinical problems
- What tests to do in primary care?
- How to interpret the results
- When to refer?
- New treatments
DIARRHOEA
Case History

- 28 year old
- Sudden onset of diarrhoea 5/12 ago
- BO x 6 day
- Liquid motion
- No nocturnal symptoms
- No systemic symptoms
- Examination normal
Differentials of Diarrhoea

• Hyperthyroidism
• IBS-Diarrhoea
• Colorectal cancer
• Coeliac
• Inflammatory Bowel Disease
• Bile salt malabsorption
• Small bowel bacterial overgrowth
• Lactose malabsorption
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BSG Coeliac screening guidelines

• Symptoms

1. Chronic or intermittent diarrhoea
2. Persistent or unexplained GI symptoms including nausea and vomiting
3. Recurrent abdominal pain, cramping or bloating
4. Sudden or unexpected weight loss
5. Unexplained iron deficiency anaemia
6. Persistent oral ulceration
BSG Coeliac screening guidelines

• Symptoms
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Coeliac screening

- Tissue transglutaminase (TTG) IgA
- 96% reliable
- Should be referred if positive – endoscopy remains gold standard

Villous atrophy
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Presenting CD Symptoms

- Diarrhoea 70%
- Abdominal pain 50%
- Rectal bleeding 30%
- Fatigue and anorexia 70%
- Mouth ulcers 50%
Include MRI of patient from clinic last week.
Crohn’s disease is a progressive and aggressive disease

Cosnes et al. Inflamm Bowel Dis. 2002;8:244-250.
Most patients will require surgery & recurrence is likely

Cumulative Probability of Surgery

Postsurgical Recurrence


Disease progression in Crohn’s disease can have devastating effects
Faecal Calprotectin

- Stable protein produced by inflammatory cells
- Assayed in stool

- Sensitive and specific in differentiating IBS from IBD
- 80-90% sensitive
Calprotectin

- Faecal calprotectin outperforms markers for general inflammation, such as C-reactive protein (CRP) or erythrocyte sedimentation rate (ESR)
Feecal Calprotectin

• Reference Range

  – Less than 50mcg/g stool      NORMAL
  – More than 50mcg/g stool     MILDLY ABNORMAL
  – More than 150mcg/g stool   DEFINITELY ABNORMAL
10 minute screening test on stool sample
£12.50 per test
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Does IBS-D really exist?

• Plenary talk at the British Society of Gastroenterology meeting in 2012

• These conditions were underdiagnosed
Bile Salt/Acid Malabsorption BAM

Secondary BAM
- Post cholecystectomy
- Crohn's disease

Primary BAM

? Up to 50% of IBS D
Bile Salt Malabsorption

- SeCHAT scan
- Trial of cholestyramine
Small Bowel Bacterial Overgrowth

- Often clear history
- Play a role in up to 80% of IBS-D
Small Bowel Bacterial Overgrowth

- Definitive test is hydrogen breath testing

- Trial of treatment with course of abiotics (cipro, doxycycline, metronidazole, co-amoxiclav)
Lactose Intolerance

• Loss of lactase activity after infant is normal

• 5% loss in caucasian population but much greater in other groups

• Gradual loss throughout adult life
Lactose Intolerance

- High incidence reported in IBS – over 50%
- Temporary loss after infection
- Dose dependent
Lactose Intolerance

• 2 weeks of lactose free
  – Milk
  – Cheese
  – Yoghurt
TREATMENT OF IBS
## Summary of treatments

<table>
<thead>
<tr>
<th>Predominant symptom</th>
<th>1&lt;sup&gt;st&lt;/sup&gt; Line</th>
<th>2&lt;sup&gt;nd&lt;/sup&gt; Line</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pain</td>
<td>Antispasmodics Mebeverine</td>
<td>Amitryptiline</td>
</tr>
<tr>
<td>Diarrhoea</td>
<td>Loperamide</td>
<td>Amitryptiline</td>
</tr>
<tr>
<td>Constipation</td>
<td>Laxatives Osmotic Fybogel</td>
<td>New drugs</td>
</tr>
<tr>
<td>Bloating and distension</td>
<td>Antispasmodics</td>
<td>Amitryptiline</td>
</tr>
</tbody>
</table>
Probiotics

- Reduce bloating and flatulence
- VSL-3
FODMAPS
FODMAPs

- Fermentable Oligo, Di, Mono and Polyol saccharides
- Short chain carbohydrates
- Generate gas and liquid stool

- Up to 70% response rate in the right patients
  - Bloating
  - Diarrhoea
  - Dietary trigger
Low FODMAP Diet

LACTOSE
- Milk
- Yogurt
- Cottage Cheese
- Ice Cream
- Ricotta Cheese
- Custard

FRUCTOSE
- Apple
- Boysenberry
- Cherries
- Watermelon
- Artichoke
- Asparagus
- Sugar snap peas
- Agave
- Honey
- High Fructose Corn Syrup
- Rum

FRUCTANS/GOS
- Inulin
- Chicory Root
- FOS
- Artichokes
- Garlic
- Leeks
- Shallot
- Onion
- Onion & Garlic Powders
- Pistachios
- Cashews
- Chickpeas
- Red Kidney Beans
- Baked Beans
- Soybeans
- Rye
- Wheat
- Barley

POLYOLS
- Cauliflower
- Mushrooms
- Pumpkin
- Snow peas
- Sorbitol
- Mannitol
- Isomalt
- Xylitol
- Sugar-free candies, gum, some medications

High FODMAP List

mindfulmealsblog.com
## Low FODMAP diet

<table>
<thead>
<tr>
<th>High</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apples</td>
<td>Banana</td>
</tr>
<tr>
<td>Apricots</td>
<td>Blueberry</td>
</tr>
<tr>
<td>Cherries</td>
<td>Grapefruit</td>
</tr>
<tr>
<td>Mango</td>
<td>Grapes</td>
</tr>
<tr>
<td>Pear</td>
<td>Melon</td>
</tr>
<tr>
<td>Nectarine</td>
<td>Kiwi</td>
</tr>
<tr>
<td>Peaches</td>
<td>Lime</td>
</tr>
<tr>
<td>Plum</td>
<td>Oranges</td>
</tr>
</tbody>
</table>
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Case History

- TFTs normal
- Coeliac screen negative
- Fecal calprotectin normal
- Cholestyramine no effect
- No clear relationship to antibiotics

Better with
  - Lactose free diet
  - Probiotics
  - Low FODMAP diet
CONSTIPATION
Case History

- 58 year old lady
- Constipated as long as she can remember
- No major recent change
- No rectal bleeding
- Using movicol and senna long term
  - Watery stool
  - Episodes of incontinence
Case History

• Without laxatives would not go for 2 weeks or more
• No urge
• Motion not hard
• Examination unremarkable
• Multiple colonoscopies in the past
Differentials of Constipation

- **Medical**
  - Hypercalceamia
  - Hypothyroidism

- **Mechanical**
  - Left sided colonic cancer

- **Clinical**
  - Normal transit constipation
  - Slow transit constipation
  - Defacatory disorder
Differentials of Constipation

- **Medical**
  - Hypercalceamia
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  - Left sided colonic cancer

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Calcium TFTs sigmoidoscopy, colonoscopy

Clinical Clinical Clinical
Normal transit constipation

- Stool transit and frequency are normal
- Hard stools
- Difficult evacuation

- Usually responds to fibre, fluids, prn laxatives

Does not usually require referral
Slow Transit constipation

- Young women
- Infrequent urge to defecate
- Normal stool

- Usually requires long term laxatives (osmotic and stimulant)

- Often do not work
Prucalopride (Resolor)

- 5HT4 agonist
- More GI selective
- Effective in treating chronic constipation and IBS-C

Camilleri 2008
NICE guidance

- An option for the treatment of chronic constipation in young women
- Failed two laxatives from different classes at highest tolerated dose for six months
- If no effective after 4 weeks discontinue
- Only prescribed by a clinician with an experience of treating chronic constipation
## Classes of Laxatives

<table>
<thead>
<tr>
<th>Osmotic</th>
<th>Stimulant</th>
<th>Bulking agents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lactulose Movecol</td>
<td>Senna Dulcolax</td>
<td>Fybogel</td>
</tr>
<tr>
<td>Retain water</td>
<td>Stimulate motility</td>
<td>Add fibre</td>
</tr>
</tbody>
</table>
Other New Drugs

• Linaclotide
  – Acts on Guanylate cyclase
  – Increases secretions and reduces pain
Linaclotide

Linaclotide 290mcg per day
Improved pain scores
More spontaneous bowel motions

Not NICE assessed

£40 per month
Slow Transit constipation

- Young women
- Infrequent urge to defecate
- Usually requires long term laxatives (osmotic and stimulant)

May require referral
Defacatory disorder

- Prolonged and unsuccessful straining
- Feeling of a lump
- History of digitation
- History of pelvic floor damage
Rectocele
Defacatory disorder

- Prolonged and unsuccessful straining
- Feeling of a lump
- History of digitation
- History of pelvic floor damage

- Surgery if medical fails

Should be referred
Case History

- Likely slow transit constipation
- Failed 2 classes of laxatives

- Ix – checked TFTs and Ca

- Tx
  - Prucalopride 2mg od
  - Biofeedback
  - Dietician

- Able to stop laxatives
- Improved quality of life
RECTAL BLEEDING
Case History

• 28 year old lady
• Long history of BRB and constipation
  – Occurs for weeks at a time
• Assumed due to haemorrhoids
• Surgical referral
• Triaged to surgical Flexible sigmoidoscopy list
Differentials

- Colorectal cancer/polyps
- Inflammatory bowel disease
- Haemorrhoids/fissure
- Diverticulitis
Differentials

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NICE Referral Guidelines for CRC

• For more than 6 weeks

• Aged over 40 with looser stool and rectal bleeding
• Aged over 60 with rectal bleeding alone
• Aged over 60 with loose stool alone

• Urgent 2ww referral pathway
Predictive value of LGI symptoms

- Man over 80
  - Rectal bleeding 5%
  - CIBH 3%
  - Diarrhoea 1.2%
  - Constipation 0.7%

- 30% had none of the signs or symptoms
Figure 1.5 Number of new cases and age-specific incidence rates by sex, colorectal cancer, UK, 2005
Alarm Features

- Weight loss
- Nocturnal symptoms
- Severity of symptoms
- FH of colon cancer
- Anaemia
Presenting UC symptoms

- Rectal bleeding: 90-95%
- Change in bowel habit:
  - Diarrhoea: 70%
  - No change: 30%
  - Constipation: 5%
- Abdominal pain: 30% (mild 25%)
- Weight loss: 40% (1-5kg 30%)
Case History

• Flexible sigmoidoscopy showed a proctitis extending over 5cm

• Resolution with mesalasine enemas
Testing in Primary Care

• PR examination

• Full blood count (FBC)
Testing in Primary care

- Feecal Occult bloods
  - Effective for asymptomatic population as a whole
  - Not for symptomatic individuals

- Carcinoembryonic antigen (CEA)
  - No role for screening
Rectal Bleeding Referral

- Aged over 50
- Urgent referral or 2ww pathway
### Rectal Bleeding Referral

#### Referral < 50 years

<table>
<thead>
<tr>
<th>Rectal bleeding</th>
<th>Diarrhoea</th>
<th>Systemically unwell</th>
<th>Differential</th>
<th>Referral Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Perianal problem/UC</td>
<td>Direct access flexi sig</td>
</tr>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>IBS/UC/CD</td>
<td>Routine OPD referral</td>
</tr>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Crohn’s/UC</td>
<td>Urgent OPD referral;</td>
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SUMMARY AND CONCLUSIONS
Diarrhoea

- Broad differential which may require more consideration and possible referral
- Coeliac screen for almost everybody
- Faecal calprotectin is increasingly available
- Simple treatments can be tried in primary care
Constipation

- New drugs now available/emerging for those failing laxatives

- Consider defacatory disorders although uncommon
Rectal bleeding

- NICE referral guidelines are limited so clinical judgement required

- Consider ulcerative colitis in those with persistent rectal bleeding (direct access flexi sig)
Questions and thank you

Have a seat Kermit. What I’m about to tell you might come as big shock...