

Diarrhoea

IBD

IBS

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# DIARRHOEA

- The abnormal passage of 3 or more liquid stools per day
- Daily stool weight of 200g/day
- > 4 weeks = chronic








# DIARRHOEA

- Reported by 7-14% of elderly population
- 4-5% average western population
- Considerable overlap between functional bowel disease (IBS) and true diarrhoea
- Wide differential diagnosis with very similar symptoms
- Reliance on clinical judgement








**THE IMPORTANCE OF AN  
AN ACCURATE HISTORY  
CANNOT BE  
UNDERESTIMATED**

# A patient's idea of what constitutes diarrhoea may not be what you think!

## Bristol Stool Chart

Type 1		Separate hard lumps, like nuts (hard to pass)
Type 2		Sausage-shaped but lumpy
Type 3		Like a sausage but with cracks on its surface
Type 4		Like a sausage or snake, smooth and soft
Type 5		Soft blobs with clear-cut edges (passed easily)
Type 6		Fluffy pieces with ragged edges, a mushy stool
Type 7		Watery, no solid pieces. <b>Entirely Liquid</b>

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# Diarrhoea

- Faecal incontinence is often construed as diarrhoea
- To some BO  $>1x$  a day is abnormal
- Vegetarians often pass type  $>2$  stools
- In the elderly, patients on opiates, and those with intermittent diarrhoea consider the possibility of constipation with overflow (AXR)



# Diarrhoea

features suggestive organic pathology

- < 3 months duration
- Nocturnal symptoms
- Associated with weight loss
- Continuous rather than intermittent (vs IBS)
- Presence of blood mucus or steatorrhoea
- Associated with constant pain not related to bowel motions

# Diarrhoea

## features suggestive organic pathology

- Presence risk factors: FH, previous surgery, pancreatic disease, systemic disease, alcohol, drugs incl recent antibiotics, travel overseas.
- Blood tests: Anaemia, raised inflammatory markers, positive coeliac screen

# IRRITABLE BOWEL SYNDROME

- Affects 5-11% of population of most countries
- Prevalence 3<sup>rd</sup> and 4<sup>th</sup> decades
- Female preponderance
- Duration of symptoms in studies 3-11 years
- Precipitated/exacerbated by stress/life event
- Post infectious

# IBS: Manning Criteria

- Pain relieved by defecation
- More frequent stools at onset of pain
- Looser stools at onset of pain
- Visible abdo distension
- Passage of mucus per rectum
- Sense of incomplete evacuation

# IBS: Rome Criteria

Recurrent abdominal pain or discomfort at least 3 days a month in the past 3 months, assoc with 2 or more of the following:

- Improvement with defecation
- Onset assoc with change in frequency of stool
- Onset assoc with change in form (appearance) of stool

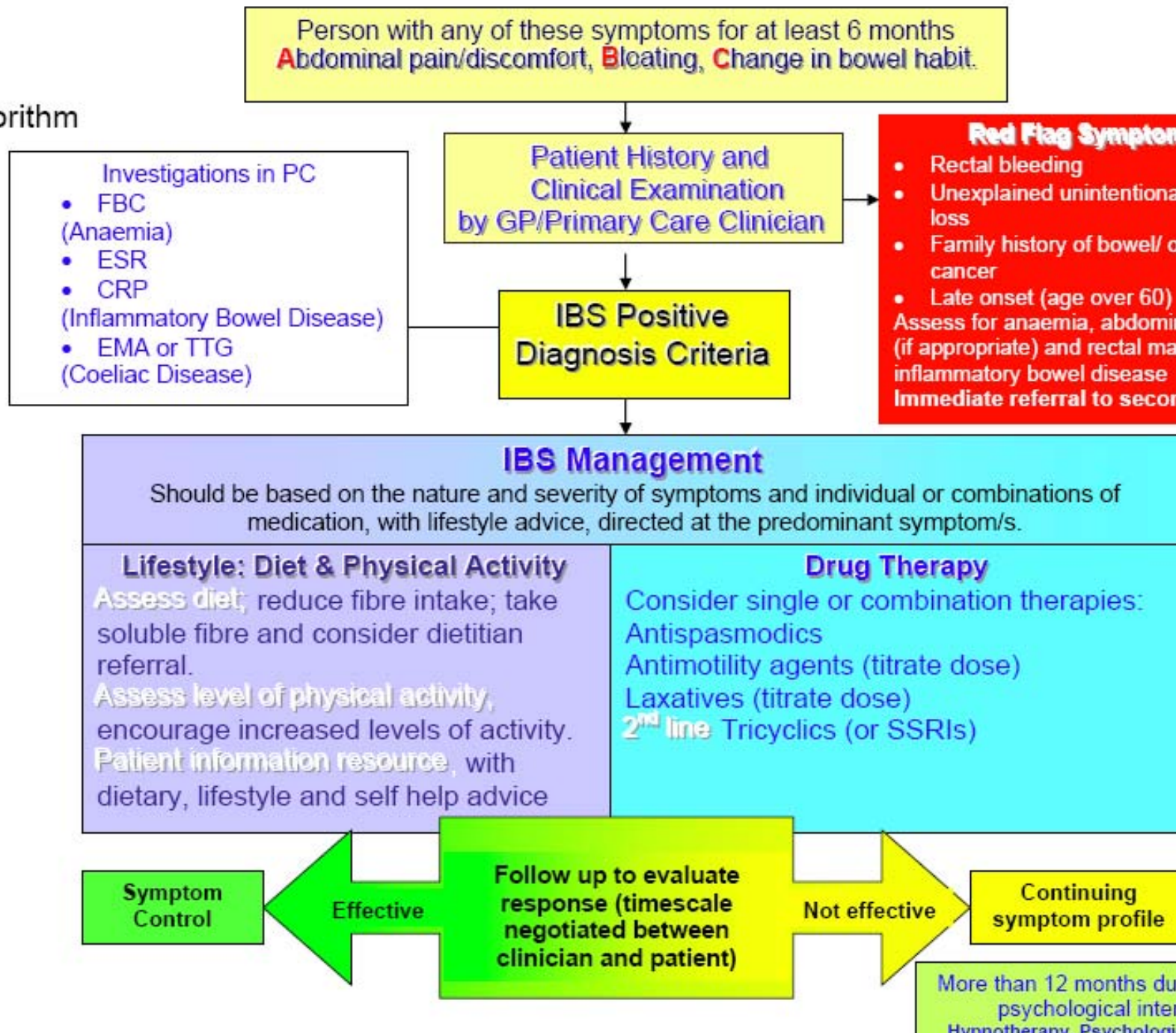
# IBS: Rome Criteria Sub Classification

- IBS-C - hard stools >25% of the time
- IBS-D - loose stools >25% of the time
- IBS-M – mixed

# IBS: key indicators

- bloating (95%)
- intermittent constipation/ diarrhoea
- repeated urge to defecate 1<sup>st</sup> thing am or after food
- Frequent previous consultations
- Mood/ Anxiety

# IBS Algorithm



Person with any of these symptoms for at least 6 months  
**A**bdominal pain/discomfort, **B**loating, **C**hange in bowel habit.

- Investigations in PC
- FBC (Anaemia)
  - ESR
  - CRP (Inflammatory Bowel Disease)
  - EMA or TTG (Coeliac Disease)

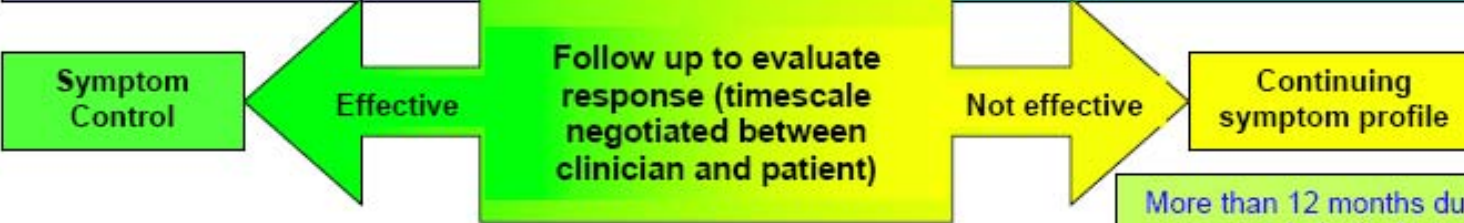
Patient History and Clinical Examination  
by GP/Primary Care Clinician

- Red Flag Symptoms**
- Rectal bleeding
  - Unexplained unintentional loss
  - Family history of bowel cancer
  - Late onset (age over 60)
- Assess for anaemia, abdominal pain (if appropriate) and rectal manovometry in inflammatory bowel disease  
Immediate referral to secondary care

IBS Positive Diagnosis Criteria

**IBS Management**  
Should be based on the nature and severity of symptoms and individual or combinations of medication, with lifestyle advice, directed at the predominant symptom/s.

<p><b>Lifestyle: Diet &amp; Physical Activity</b> Assess diet; reduce fibre intake; take soluble fibre and consider dietitian referral. Assess level of physical activity, encourage increased levels of activity. Patient information resource, with dietary, lifestyle and self help advice</p>	<p><b>Drug Therapy</b> Consider single or combination therapies: Antispasmodics Antimotility agents (titrate dose) Laxatives (titrate dose) 2<sup>nd</sup> line Tricyclics (or SSRIs)</p>
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# IBS: management

*“Many IBS patients are not committed to seeking a somatic explanation for their symptoms and the majority readily accept the possibility of a psychological contribution to their gut problems”*

*BSG guidelines on IBS Gut 2007*

# IBS Patient Network “Top 10” Requests

- A clear and knowledgeable explanation of what IBS is
- A statement that there is no miracle cure
- A clear indication that it is my body, my illness, and that it is up to me to take control
- A clear explanation that there will be good days and bad days and that there will be light at the end of the tunnel
- An explanation of the different treatment options
- Recognition that IBS is an illness

# IBS Patient Network “Top 10” Requests (contd)

- Consider and discuss complementary/ alternative therapies
- Offer at least 1 complimentary/ alternative therapy
- Offer support and understanding
- Be aware of conflicting emotions in someone who is newly diagnosed

# IBS: Complimentary Therapies (Nice 2008)

“The review evidence suggests that some herbal preparations may be clinically effective in people with IBS and are well tolerated. However, the GDG believed there were too many uncertainties regarding type and dose of herbal medicines to make a recommendation for practice, and proposed that these interventions should be investigated further in a research recommendation.”

“Healthcare professionals should discourage the use of aloe vera in the treatment of IBS.”

“The use of acupuncture should not be encouraged in the treatment of IBS”

“ The use of reflexology should not be encouraged in the treatment of IBS”

Alternative therapies difficult to study and may not suit everybody.

## IBS: Psychological interventions

“Referral for psychological interventions (cognitive behavioural therapy [CBT], hypnotherapy and/or psychological therapy) should be considered for people with IBS who do not respond to pharmacological treatments after 12 months and who develop a continuing symptom profile (described as refractory IBS).” *Nice 2008*

# IBS: NICE guidelines

## RECOMMENDATION

Healthcare professionals should encourage people with IBS to identify and make the most of their available leisure time and to create relaxation time.

## RECOMMENDATION

Diet and nutrition should be assessed for people with IBS and the following general advice given.

- Have regular meals and take time to eat.
- Avoid missing meals or leaving long gaps between eating.
- Drink at least eight cups of fluid per day, especially water or other non-caffeinated drinks, for example herbal teas.
- Restrict tea and coffee to three cups per day.
- Reduce intake of alcohol and fizzy drinks.
- It may be helpful to limit intake of high-fibre food (such as wholemeal or high-fibre flour and breads, cereals high in bran, and whole grains such as brown rice).
- Reduce intake of 'resistant starch' (starch that resists digestion in the small intestine and reaches the colon intact), which is often found in processed or re-cooked foods.
- Limit fresh fruit to three portions per day (a portion should be approximately 80g).
- People with diarrhoea should avoid sorbitol, an artificial sweetener found in sugar-free sweets (including chewing gum) and drinks, and in some diabetic and slimming products.
- People with wind and bloating may find it helpful to eat oats (such as oat-based breakfast cereal or porridge) and linseeds (up to one tablespoon per day).

# IBS:Diet

- Diet : - soluble (e.g oats) rather than insoluble fibre
  - Bread/ wheat exacerbate bloating
  - Linseeds help bloating; constipation
  - Avoidance low resistant starch
  - Lactose (up to 90% asian and middle-eastern populations lactose intolerant)
- **FODMAPs** (Fermentable Oligo-, Di- and Mono-saccharides, and Polyols)  
avoidance high fructose fruits (Apples, apricots, cherries, mangoes, pears); legumes; Lactose; sweeteners containing “ol”; corn syrup.

# IBS: Exclusion Diets

- Many exclusion diets difficult to follow
- Little evidence to suggest skin prick testing for food allergy useful
- Some weak evidence that IgG based food exclusions may help. [ Desko 2006: 20 pt; Zar 2005 25 pt]



# IBS: Pharmacotherapy

- Antispasmodics (mebeverine, hyoscine) improve pain
- Low dose tricyclics eg amitriptyline starting at 20mg
- SSRIs
- Anti diarrhoeal eg loperamide
- Laxatives - may break cycle of intermittent constipation diarrhoea
  - avoid stimulants; fibre based; magnesium salts and polyethylene glycol less bloating than Lactulose
- Probiotics – most studied VSL#3
  - worth trying range of products

## PROCULOPRIDE (Resolor)

5HT<sub>4</sub> receptor agonist with pro-kinetic properties

“Prucalopride<sup>1</sup> should only be considered for women who have tried at least two different types of laxative and lifestyle changes for at least 6 months, but have not had relief from constipation.” *Nice 2010*

# IBS : Resources for Patients

- IBS for Dummies
- UK IBS society: [www.theguttrust.org](http://www.theguttrust.org)
- Info from International Foundation for Functional Gastrointestinal Disorders (IFFGD)

[www.aboutIBS.org](http://www.aboutIBS.org)

# INFLAMMATORY BOWEL DISEASE

## CROHNS

- Chronic transmural granulomatous inflammation with a tendency to fistulation and stricture formation
- Anywhere in GI tract (mouth to anus)
- Discontinuous

## ULCERATIVE COLITIS

- Inflammation confined to mucosa
- Colon and rectum
- Continuous

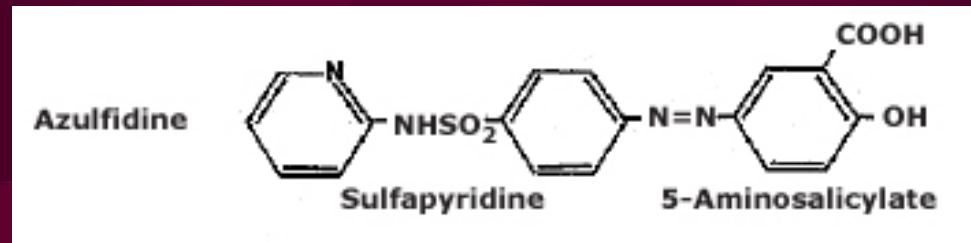
Both characterised by relapses and remissions

# IBD treatment

- Treatment for Crohns Colitis and Ulcerative Colitis similar
- 5 ASAs are 1<sup>st</sup> line drugs for maintenance of remission
- 2<sup>nd</sup> line drugs : Azathioprin, 6 mercaptopurine, methotrexate

# IBD Rx: 5ASAs

## SULFASALAZINE



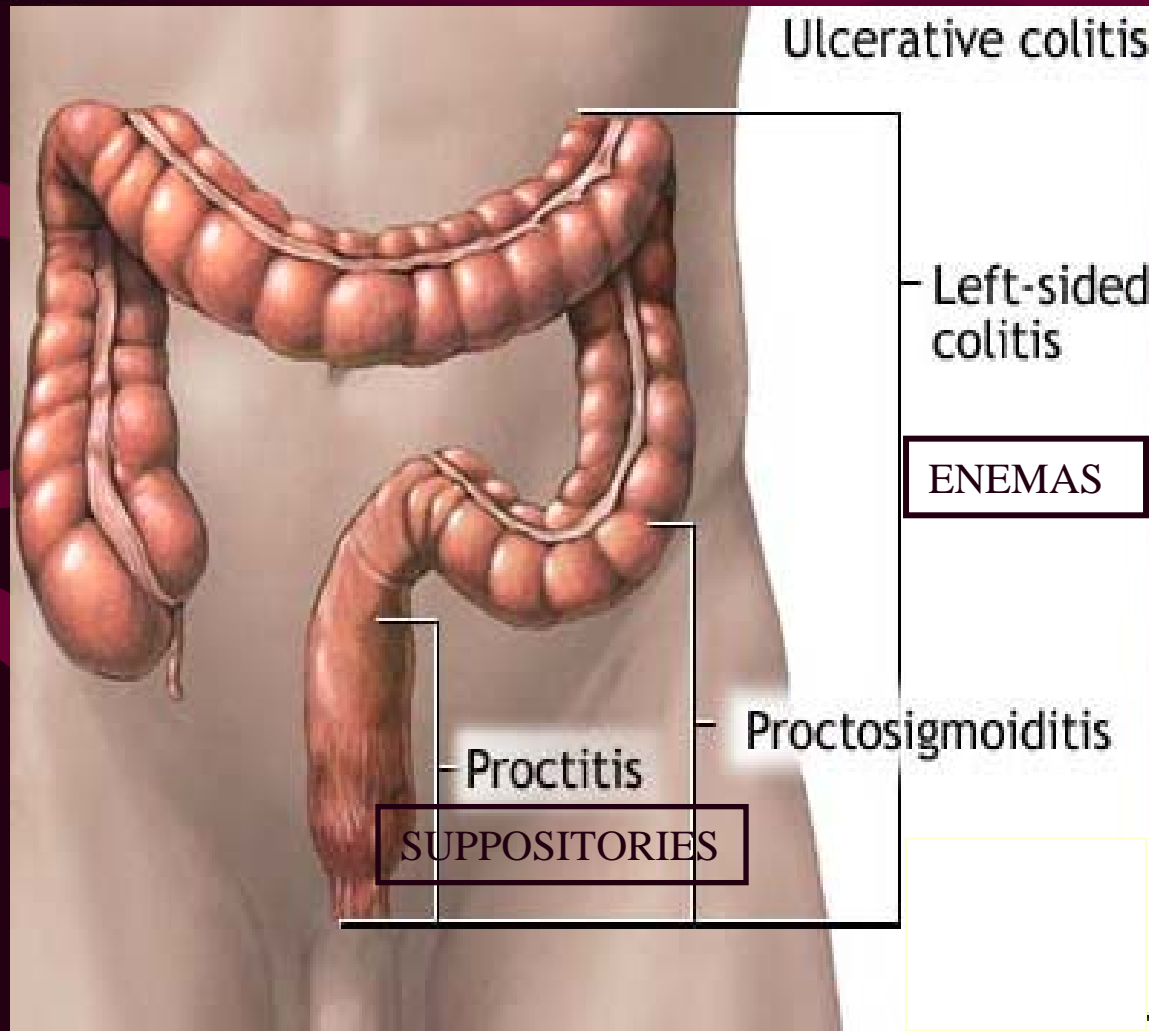
- 5 ASA + sulfapyridine broken down by bacterial enzymes in colon
- 25% intolerant / side effects

# IBD Rx

## Mesalazine preparations have differing delivery systems

- ASACOL - Eudragit resin coating; dissolves pH >7
  - drug delivery distal small bowel /colon (MESREN)
- PENTASA - ethylcellulose coated granules
  - steady release duodenum to rectum pH dependent
- OLSALAZINE - 2 molecules linked by azo bond
  - requires colonic bacteria to cleave azo bond
- BALSALAZIDE - attachment to inert inabsorbed carrier molecule
  - requires colonic bacteria
- MEZAVANT XL - Multi matrix system designed for drug release in colon
  - once daily dosage

# Rx Flares: Topical may suffice in distal disease



- 5 ASA enemas more effective than steroids

# Rx Flares

- Mild to Moderate flare – increase dose 5 ASA eg Asacol up to 4.8g daily
- If no improvement after 2 weeks or moderate flare start steroids – Prednisolone 40mg at least 1-2 weeks then reducing dose over 6-8 weeks or longer
- Severe – urgent hospital assessment