# Case Presentation Spier GI Fellows Weekend February 2019

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#### First Presentation 2011

- 50 year-old male. Married. Director of a restaurant chain.
- Long history of intermittent gastrointestinal symptoms
  - Diarrhoea 3 watery stools / day
  - Sensation of incomplete evacuation
  - Bloating
  - No warning symptoms
- Other symptoms
  - Feeling of a lump in the throat
  - Anxiety panic attacks when flying
  - Insomnia
  - Fatigue

### Question 1

• This sounds like

- 1. Neurogenic mucous colitis
- 2. Spastic colon
- 3. Irritable bowel syndrome
- 4. A functional gastrointestinal disorder

#### This sounds like

Neurogenic mucous colitis

Spastic colon

Irritable bowel syndrome

A functional gastrointestinal disorder

# Functional Gastrointestinal Disorder (IBS)

- IBS minority seek healthcare (20% pop affected)
- Chronic disorder
- Heterogeneous
- Diagnosis is symptom based
- No diagnostic test
- No demonstrable pathology
- "Neuro-visceral dysharmony"
- "Selective attention to visceral stimuli"

# Symptoms of IBS

- Onset at adolescence early adulthood
- Gender: female > male
- Intermittent and longstanding (> 6 months)
- Symptoms
  - A. Abdominal pain
  - B. Bloating
  - C. Constipation
  - D. Diarrhoea
  - E. Extra-intestinal symptoms

Once diagnosis of IBS established the chance of an alternative diagnosis being made < 5%.

- ➤Onset in the elderly
- ➤ Loss of weight
- **≻**Vomiting
- ➤ Nocturnal symptoms
- ➤GI Bleeding
- ➤ Cyclical pain in woman

### Extra-intestinal symptoms of IBS & IBS Comorbidity

- Chronic fatigue
- Insomnia
- Eating disorders
- Fibromyalgia syndrome
- Headaches
- Globus
- Chronic backache
- Chronic pelvic pain
- Interstitial cystitis
- Depression, Anxiety, PTSD
- Sexual dysfunction
- Abuse: sexual, physical, emotional

#### Patient Explanations

"IBS never travels alone"

"IBS clusters with other conditions"

"Interstitial cystitis is IBS of the bladder"

"Anxiety amplifies IBS symptoms"

'IBS symptoms often increases anxiety"

### My approach 2011

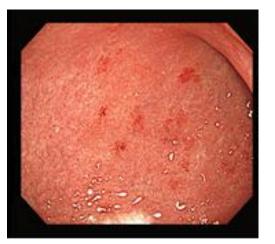
- Sounds like diarrhoea-predominant IBS
- A number of IBS associated symptoms
- 50 years of age and no previous investigation
- I decide he needs investigation
- Routine blood tests (FBC, TSH, Liver profile, Ferritin, CRP)
- Coeliac screen: IgA anti-TTG = 0 U/ml
- Schedule a colonoscopy

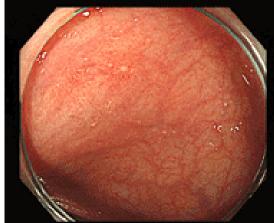
# Colonoscopy

Mild proctitis with loss of vascular pattern

Remainder of the colon normal

Terminal ileum normal



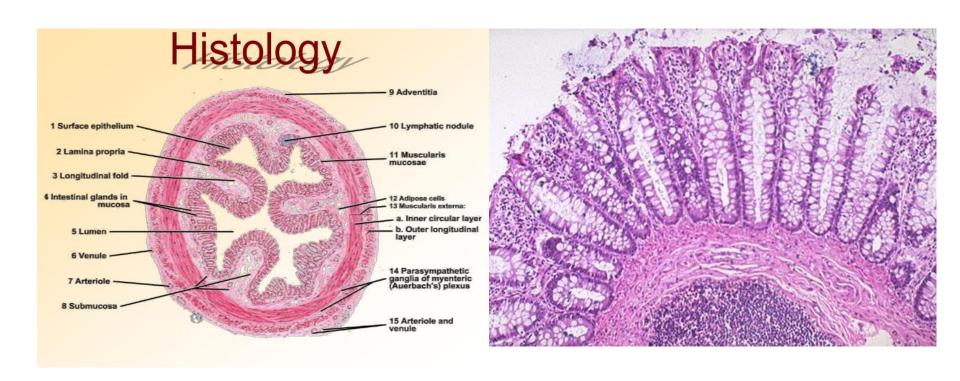


Biopsies from the proximal colon: Normal

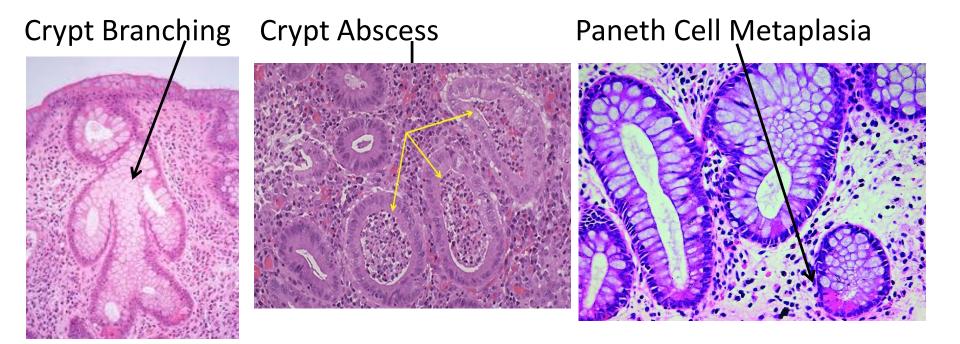
#### Rectum:

Focal active colitis with crypt abscess
No chronic inflammation
Slight crypt irregularity
No Paneth cell metaplasia

# The histological findings diagnostic of UC on a rectal biopsy include



The histological findings diagnostic of UC on a rectal biopsy include



# My diagnosis in this patient?

1. Ulcerative colitis

2. IBS

3. Ulcerative colitis and IBS

4. None of the above – he needs further investigation

#### My diagnosis in this patient?

Ulcerative colitis

**IBS** 

Ulcerative colitis and IBS

None of the above – he needs further investigation

### Relationship between IBS and UC

 Symptoms of mild ulcerative colitis can be confused with diarrhoea predominant IBS

• Ulcerative colitis in remission. IBS much more common than in controls (31% vs 7.5%)

### Treatment

5-ASA topical and oral

- Low FODMAP diet
- Peppermint Oil
- Escitalopram (SSRI)

### A low FODMAP diet MUST include?

1. Exclusion of lactose and wheat as these are FODMAP foods

2. A diet that excludes all fermentable carbohydrates

3. Is the same as a Banting diet (low carb / protein / high fat)

4. None of the above

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#### Fermentable Oligosaccharides, Di-sacharrides, Mono-sacharrides and Polyols

- Small carbohydrates and fibre
- Poorly absorbed
- Osmotically active in the small intestine
- Rapidly fermented in the colon

#### Can explain all the symptoms of IBS in sensitive individuals

Examples of High FODMAP Containing Foods				
Lactose	Excess Fructose	Fructans	Oligosaccharides	Polyols
Milk	Apples	Onion	Legumes	Peach
Custard	Pears	Garlic	Pistachios	Pears
Cottage cheese	Watermelon	Wheat, Barley, Rye	Cashews	Nectarines
Ricotta cheese	Mango	Dried fruit		Apricots
Ice cream	Figs	Artichoke		Mushrooms
Yoghurt	Grapes	Aspargus		Cauliflower

#### Is there evidence that a low FODMAP diet is effective in IBS?

- Dietary studies in IBS difficult
- High placebo responses
- No objective measurement of symptoms
- Accurate control of diet intake almost impossible

 Nevertheless there is good evidence that up to 75% of patients will respond if implemented correctly

# Dietary poorly absorbed, short-chain carbohydrates increase delivery of water and fermentable substrates to the proximal colon.

Barrett, Gearry, Muir et al Aliment Pharmacol Thera 2010

- 12 patients with ileostomies
- Healthy small intestine
- High FODMAP vs Low FODMAP diet
- 4 day cross over trial
- Effluent collection
  - weight increased by a mean of 22% (95% CI, 5-39)
  - water content by 20% (2-38%)
  - dry weight by 24% (4-43%)
  - Volunteers perceived effluent consistency was thicker (95% CI, 0.6-1.9) with the low FODMAP diet than with the high FODMAP diet (3.5-6.1; P = 0.006).

### Low FODMAP diet

- 6 to 8 week exclusion
- Reintroduction of FODMAP groups one at a time
- Identify FODMAP triggers

- Complete FODMAP exclusion is unstainable
- FODMAP exclusion is the beginning not the end
- Aim is to re-introduce as many FODMAPs as possible
- Investment with long term benefits

# Email a few weeks later

• 5-ASA + SSRI + low FODMAP programme

Anxiety levels much improved

GI symptoms definitely better

# Returns 18 months later

Diarrhoea getting bad again

On low FODMAPs

Anxiety well controlled on SSRI

# I request a stool test

Clostridum difficile toxin

Negative

Calprotectin

120ug/g

### 50 year-old male with IBS-D and mild UC proctitis

Paging through his folder looking at previous results

- Routine blood tests (FBC, TSH, Liver profile, Ferritin, CRP)
- Coeliac screen: Anti-TTG = 0

# I plan to repeat his endoscopy

- But I should
  - 1. Check his coeliac genetics
  - 2. Request a P-ANCA
  - 3. Check his immunoglobulins
  - 4. Check his Chromogranin A



Check his coeliac genetics A

Request a P-ANCA B

Check his immunoglobulins C

Check his Chromogranin A D

# I check immunoglobulins

- $\lg A = < 0.07$
- IgG = 11.6
- IgM = 0.6

Original Coeliac Blood Test

Coeliac screen: IgA anti-TTG = 0 U/ml

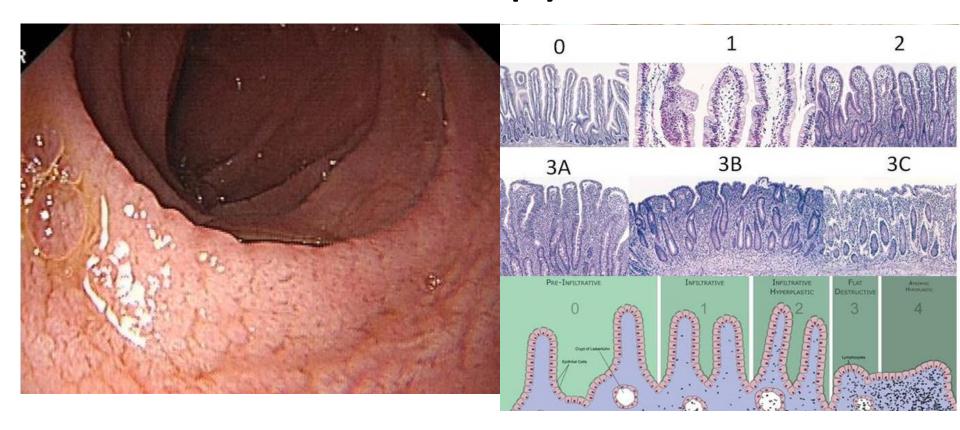
- Fewer than 20% of coeliacs are diagnosed worldwide
- TTG is an IgA assay
- False negative serology due to selective IgA deficiency
- Up to 3% of coeliacs are IgA deficient

# Testing for Coeliac Disease: NICE 2015

IgA anti-TTG and IgA as first line test

- If IgA Deficient (< 0.7g/l)</li>
  - IgG EMA
  - IgG deamidated gliadin peptide (DGP)
  - IgG tTG

# Gastroscopy – D2



# Diagnosis Revised

- Coeliac disease
- Mild UC proctitis

Diet changed from low FODMAP to strict gluten free

Diarrhoea resolves completely



# Thank You







Should You Go Gluten-Free?

by CHRIS KRESSER

