A GP Perspective
Inflammatory Bowel Disease

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Incidence / prevalence

Incidence UC 10: 100,000
Incidence CD 6-7: 100,000 (increasing)

Prevalence about 150:100,000 for each
Facts and Figures

- IBD affects 1:400
- Doubling in Crohn's Disease over 30 years.
- Young at risk: Teenagers/young adults 15-25, second peak 55-65yrs
- North Europe > S Europe. North UK > S UK
- "White collar"
- £720 million/year. 14% of patients (hospitalisations & surgeries) account for 50% of cost
- Cost per 6 months £1200 (UC) and £1600 (CD)
- Quiescent vs relapse = X3 ↑ costs
- Hospitalisations = X20.
Pathogenesis

3 theories:

- Genetic: 10% IBD pt.s with + family hx
- Infectious vs. Environmental: *L. monocytogenes*, *M. paratuberculosis*, stress, smoking, NSAIDs
- Immunologic: imbalance between pro- and anti-inflammatory cytokines in gut lumen
Ulcerative Colitis
Ulcerative Colitis

- Superficial mucosal inflammation of colon only
- Begins at rectum and spreads continuously
- 30% proctitis, 40% L sided colitis, 30% pancolitis
- Sxs: bloody diarrhoea, faecal urgency, tenesmus, abdominal cramping
Crohn’s Disease

- Transmural inflammation of any part of GI tract, presence of “skip” lesions and non caseating granulomas
- Rectum often spared
- 30% small bowel (usually terminal ileum), 40% ileum/colon, 25% colon, 5% stomach/duodenum
- Sxs: non-bloody diarrhoea, weight loss, fever, RLQ pain and/or mass, perianal disease with abscess and/or fistulas
Disease Location

**UC:**
- Recto-sigmoid: 30-50%
- Left sided: 20-30%
- Pancolitis: 20-30%

**CD:**
- Colonic: 33%
- Ileocolonic: 33%
- Small bowel: 30%
- Perianal: 23%
- Upper GI: 2-4%
UC vs. CD

Continuous/superficial
- Colon only w/ rectum
- ++Rectal bleeding
- Rare fistulas/strictures
- Surgery curative

“Skip”/Deep
- Mouth to anus±rectum
- ±Rectal bleeding
- ++fistulas/strictures
- Surgery palliative (high rate of recurrence, >50%)
Aims of treatment for IBD

- Achieve remission
- Maintain remission
- Prevent complications
- Improve quality of life

Multi-disciplinary approach to treatment: Physician, Surgeon, GP’s, IBD nurse Specialist, Dietician, Pharmacist and Psychological support. Transition Clinic. MDM discussions
Post treatment

Effective Shared care and protocols
Natural History of UC

UC acute attack → Death 33%

Subsequent acute attack → Death 12%

UC → Death 40% (Edwards & Truelove 1963)

UC in Childhood → CRCarcinoma 40% (Devroede 1971)

CD: Similar Findings (Weedon 1971)
Clinical Course of UC

- 66% Total Colectomy required in first attack
- 18% Chronic Intermittent
- 8% Chronic continuous
- 7% One episode Only
- 1% Acute Fulminating
Perianal Crohn's
Severe Disease
Facts and Figures

- Surgical Risk: CD 80% (most have >1 surgeries), UC 15-40%
- Chronic inflammation leads to the dysplasia
- Dysplasia = Severe: 40%, Mild 20% risk Synch. CRC.
- Extensive UC greatest risk of Colo-Rectal Carcinoma: most significant after 10 yrs
  - Risk 10-15%. 6-10x higher than normal population
- CD similar risk of CRC (surgeries may affect rate)
Facts and Figures

- Life time risk of steroids: 60-80%
- Osteoporosis: Steroids, inflammation and malnutrition assoc.
- Risk of fractures: 40% higher for IBD suffers
- Osteoporosis: significant cost implications
- IBD patients have shorter/"poorer" lives: 10ys
Extra-intestinal Manifestations

Upto 36%

Some ass with disease activity: Joint, skin, ocular and oral
Uveitis/episcleritis: commonest 4-12%
Arthropathies: Axial or peripheral (type I and II): 4-23%
Erythema nodosum/PG: 2-34%
Hepato-biliary: 5-15% PSC assoc with CRC and CholangioCa

Mortality

CD: 50% higher than general population. Life expectancy 10 years less
UC: slightly higher morality than general population. Risk of CRC falling
Uveitis

episcleritis

Erythema Nosdum

Peristomal Pyoderma gangrenosum
Management of UC

Acute to induce remission
1. oral +- topical 5-ASA (5-Aminosalicylic acid)
2. +- oral corticosteroids eg 40mg prednisolone
3. Azathioprine (Chronic active)
4. iv steroids/Colectomy/ ciclosporin (severe)

Maintaining remission
1. oral +- topical 5-ASA
2. +- Azathioprine (frequent relapses)
Steroids 30 day response

CD: 40%  UC: 51%  30 days full remission

CD: 35%  UC: 31%  30 days partial remission

CD: 25%  UC: 18%  30 days NON RESPONSE
Steroids 1 year response

CD: 38%  
UC: 55%  
1 yr prolonged response

CD: 24%  
UC: 17%  
1 yr steroid dependence

CD: 35%  
UC: 21%  
1 yr surgery

Need for steroids within 5 yrs: CD: 75%, UC: 63%

Although corticosteroids are effective, dependence/resistance remains common. Patients with extensive ulcerative colitis and fistulizing/stricturing Crohn's are most at risk of failing corticosteroid therapy.

The efficacy of corticosteroid therapy in inflammatory bowel disease: analysis of a 5-year UK inception cohort.

Ho GT 2006 AP&T
Euphoria
(though sometimes depression or psychotic symptoms, and emotional lability)

(Benign intracranial hypertension)

(Cataracts)

Moon face, with red (plethoric) cheeks

Increased abdominal fat

(Avascular necrosis of femoral head)

Easy bruising

Poor wound healing

Buffalo hump

(Hypertension)

Thinning of skin

Thin arms and legs: muscle wasting

Also:

Osteoporosis
Tendency to hyperglycaemia
Negative nitrogen balance
Increased appetite
Increased susceptibility to infection
Obesity

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How to improve 5ASA Response

1. Use higher dose of 5ASA
2. Use rectal therapy in extensive UC
3. Use rectal therapy in left sided UC
4. Rectal therapy can help: use for at least 2 weeks
Immunosuppressives

- CD: 70-80% start AZA/6MP
- UC: 40% start AZA/6MP
- Side effects-30-40%, poor response in 20-30% of those who tolerate treatment
  - Methotrexate
  - Thioguanine
  - Mychophenolate
  - Cyclophosphamide
  - Ant-Mycobacterial therapy
  - Thalidomide
  - Autologous Stem Cell Transplantation
  - Monoclonals: Infliximab & Adalimumab
History

- stool frequency/consistency/blood or mucus
- Weight loss
- diet
- Urgency / pain / bloating / nocturnal diarrhoea
- Associated symptoms (fatigue, joint/eye/skin problems, mouth ulcers)
- duration disease
- medication (Abx/NSAIDs)
- Travel
- Family history
- Smoking / alcohol
Examination

- fever, tachycardia, abdo findings (tender/peritonitic)
- Extra Intestinal Manifestation’s
- Weight / BMI

Investigation

- FBC, CRP, ESR, U&E, LFTs, anti TTG, glucose, TFT
- stool cultures
Differential diagnoses

**Infective**

- Bacterial: salmonella, shigella, campylobacter, E coli (O157), Gonococcal proctitis, C difficile

- Viral: HS (or chlamydial) proctitis, CMV

- Protozoal: amoebiasis
Differential diagnoses

Non-infective
- Vascular: ischaemic colitis
- Idiopathic: microscopic colitis
- Drugs (eg) NSAIDs
- Neoplasia
- Radiation
- Behcet’s
- Diverticulitis
Investigation of IBD

- Bloods
- Stool MCS
- Endoscopy
- CT
- MRI small bowel: Crohn’s disease evaluation
- Faecal calprotectin/ Small bowel permeability
  (Barium imaging: Becoming out-dated)
Classification of ulcerative colitis
Adapted Kornbluth and Sachar 2004.

<table>
<thead>
<tr>
<th>Mild</th>
<th>Moderate</th>
<th>Severe</th>
<th>Fulminant</th>
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<tbody>
<tr>
<td>&lt;4 stools</td>
<td>&gt;4 stools</td>
<td>&gt;6 bloody stools</td>
<td>&gt;10 movements</td>
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<tr>
<td>+/- blood</td>
<td>Evidence of toxicity</td>
<td>Evidence of toxicity: fever, tachycardia, anemia, elevated ESR</td>
<td>bleeding</td>
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<tr>
<td>No systemic signs of toxicity</td>
<td>Minimal signs of toxicity</td>
<td></td>
<td>Abdominal tenderness</td>
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<tr>
<td>Normal ESR</td>
<td></td>
<td></td>
<td>distension</td>
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<td></td>
<td></td>
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<td>Blood transfusion requirement</td>
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<td>Colonic dilatation</td>
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Known UC when to worry / refer

- ‘Flare’ suggested by increased stool frequency, pain, urgency, blood, mucus, weight loss, constitutional symptoms
- Fever, tachycardia
- What is current Rx?
- How were previous flares managed?
Algorithm for managing ulcerative colitis

MILD

PROCTITIS
5 ASA / steroid (topical: supp/enema)

LEFT SIDED
5 ASA / steroid (topical: enema + Oral)

PANCOLITIS
5 ASA (Oral +/- topical)

MODERATE

5 ASA / steroid (topical: supp/enema)
+/-
Oral steroids
+/-
Immunomodulator (azathioprine/6MP/ thioguanine MTX, Mycophenolate)
+/-
surgery

SEVERE

Parenteral Steroids
+/-
Ciclosporin
+/-
surgery
Miscellaneous

- Give Ca / vit D with prednisolone
- Long term steroids are not an answer
- Get smokers with CD to stop
- Where are bloods monitored?
- IBD nurse specialist
The End