Inflammatory Bowel Disease

Patients’ Health at School
What is IBD?

- Can affect any part of the GI tract—from the lips to the anus
- Extra-intestinal manifestations

**Crohn’s Disease**

**Ulcerative Colitis**

- Affects large colon and/or rectum
- Extra-intestinal manifestations

**Indeterminate Colitis**

10%--15%
Impact of IBD

THE IMPACT OF IBD ON YOUNG PEOPLE

30% of all patients with IBD present between the age of 10 and 19 years

11.9 years

The mean age for diagnosis of IBD is 11.9 years

25%

Up to 25% of young people with IBD have depression

The behaviour problems of children with IBD are found to have behaviour problems, psychiatric disorders, depression and diminished social competence

3 months

School absenteeism

Up to 3 months of school absenteeism amongst children with IBD is reported per year

Emotionally vulnerable

Children with IBD are frequently considered emotionally vulnerable

Affects educational performance

61% of under 18 year olds felt that IBD had affected their ability to perform to their full educational potential

17%

5 year diagnosis

17% of young people with IBD had to wait more than 5 years to receive a final diagnosis
Symptoms of IBD
Symptoms of IBD

- Diarrhea
- Abdominal Pain/Cramps
- Fecal Urgency
- Intestinal Bleeding
- Fever
- Weight Loss
Symptoms of IBD—Beyond the Intestines

<table>
<thead>
<tr>
<th>Area</th>
<th>Symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eyes</td>
<td>redness, pain, itching</td>
</tr>
<tr>
<td>Mouth</td>
<td>sores/ulcers</td>
</tr>
<tr>
<td>Joints</td>
<td>swelling, pain</td>
</tr>
<tr>
<td>Skin</td>
<td>red bumps, ulcerations, skin tags</td>
</tr>
<tr>
<td>Bones</td>
<td>osteoporosis</td>
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</tbody>
</table>
Complications of IBD

Crohn’s Disease
- Intestinal Obstruction
- Abscess
- Fistula
- Stricture
- Colorectal Cancer

Ulcerative Colitis
- Anemia from Blood Loss
- Perforation of Bowel
- Colorectal Cancer
- Toxic Megacolon
Treatments for IBD
# Prescription Medications

<table>
<thead>
<tr>
<th>Class</th>
<th>Agents</th>
<th>Side Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aminosalicylates</td>
<td>• Balsalazide (Colazal®, GIAZO®)&lt;br&gt; • Mesalamine formulations&lt;br&gt;</td>
<td>• Stomach pain/cramping/nausea&lt;br&gt;</td>
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<tr>
<td></td>
<td>– Lialda®&lt;br&gt; • Asacol HD®&lt;br&gt; • Delzicol®&lt;br&gt; • Pentasa®&lt;br&gt;</td>
<td>• Diarrhea&lt;br&gt;</td>
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<tr>
<td></td>
<td>• Olsalazine (Dipentum®); Sulfasalazine (Azulfidine®)</td>
<td>• Dizziness&lt;br&gt;</td>
</tr>
<tr>
<td>Corticosteroids</td>
<td>• Budesonide (Entocort®, UCERIS®)&lt;br&gt; • Methylprednisolone (Medrol®)&lt;br&gt;</td>
<td>• Muscle pain/cramps&lt;br&gt;</td>
</tr>
<tr>
<td></td>
<td>• Prednisone&lt;br&gt; • Prednisolone</td>
<td>• Nervousness or restlessness&lt;br&gt;</td>
</tr>
<tr>
<td>Antibiotics</td>
<td>• Ciprofloxacin (Cipro®, Proquin®)&lt;br&gt; • Metronidazole (Flagyl®)&lt;br&gt;</td>
<td>• Numbness, tingling&lt;br&gt;</td>
</tr>
<tr>
<td></td>
<td>• Rifaximin (Xifaxan®)</td>
<td>• Muscle pain/weakness&lt;br&gt;</td>
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<tr>
<td></td>
<td></td>
<td>• Tendon Rupture (Cipro)</td>
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</tbody>
</table>
# Prescription Medications

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<thead>
<tr>
<th>Class</th>
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<th>Side Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immunomodulators</td>
<td>• Azathioprine (Imuran®, Azasan®)</td>
<td>• Nausea, vomiting, loss of appetite</td>
</tr>
<tr>
<td></td>
<td>• Cyclosporine (Neoral®)</td>
<td>• Diarrhea</td>
</tr>
<tr>
<td></td>
<td>• 6-Mercaptopurine (Purinethol®)</td>
<td>• Itching or rash</td>
</tr>
<tr>
<td></td>
<td>• Methotrexate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Tacrolimus (Prograf®)</td>
<td></td>
</tr>
<tr>
<td>Biologic Therapies</td>
<td><strong>Anti-TNF antibodies</strong></td>
<td>• Redness, swelling, itching, pain, rash, bruising at site of injection</td>
</tr>
<tr>
<td></td>
<td>• Adalimumab (Humira®)</td>
<td>• Upper respiratory or sinus infections</td>
</tr>
<tr>
<td></td>
<td>• Certolizumab pegol (Cimzia®)</td>
<td>• Headache</td>
</tr>
<tr>
<td></td>
<td>• Infliximab (Remicade®)</td>
<td>• Nausea</td>
</tr>
<tr>
<td></td>
<td>• Golimumab (Simponi®)</td>
<td></td>
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<tr>
<td></td>
<td><strong>Integrin Antagonist Receptors</strong></td>
<td></td>
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<tr>
<td></td>
<td>• Natalizumab (Tysabri®)</td>
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<tr>
<td></td>
<td>• Vedolizumab (Entyvio™)</td>
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Children’s Healthcare of Atlanta
Over the Counter Medications

- Address only specific symptoms
- Antidiarrheal agents, Laxatives, Pain Relievers
- Important to discuss with physician BEFORE taking
Nutrition

Specific Carbohydrate Diet (SCD)

- A nutritionally balanced diet focused on removing grains, most dairy and sugars (except honey)
- Focuses on natural nutrient rich foods including vegetables, fruits, meats and nuts.

Enteral Nutrition

- Provides nutrition in the form of a liquid supplement
- Administered through nasogastric or gastrostomy tube
- Helpful when appetite is poor, or weight gain/growth is a concern
- Tube feedings can be given at night
- Oral supplements (Ensure) can be useful but do not require tube feedings
Complementary and Alternative Therapy (CAM)

What is CAM?
• Practices and products not presently part of conventional medicine

Examples
• Natural Products
  • Supplements
  • Probiotics
  • Essential Oils
• Mind & Body
  • Meditation
  • Acupuncture
  • Yoga
  • Massage

Notes
• Lack strong scientific evidence for treating IBD
• Not FDA-regulated
• Should complement, not replace, traditional therapies
## Surgery

<table>
<thead>
<tr>
<th><strong>Crohn’s Disease</strong></th>
<th><strong>Ulcerative Colitis</strong></th>
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</thead>
<tbody>
<tr>
<td>• Strictureplasty</td>
<td>• Proctocolectomy (removal of the colon and rectum)</td>
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<tr>
<td>• Gastrojejunostomy (upper GI)</td>
<td>• With end ileostomy</td>
</tr>
<tr>
<td>• Short bowel resection</td>
<td>• Restorative (ileoanal anastomosis or J pouch)</td>
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<tr>
<td>• Partial colectomy</td>
<td></td>
</tr>
<tr>
<td>• Proctocolectomy with end ileostomy</td>
<td></td>
</tr>
<tr>
<td>• Perianal surgery</td>
<td></td>
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<tr>
<td>• Intestinal transplantation</td>
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</tbody>
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Special Considerations

- Ability to swallow capsules or tablets
- Some medications may need to be taken at school
- Side effects of drug therapy
- Adherence
- Growth failure and need for nutritional supplementation
- Emotional well-being
- Frequent absences or hospitalizations
- Easy access to bathrooms
Psychosocial Aspects of IBD

Depression
Anxiety
Withdrawal
Anger
Concentration difficulties

Young Adults

Denial
Fragile self-esteem
Grief
Embarrassment

Adolescents

Magical thinking
Regression

Middle School Age

Avoidance
Distraction

Younger Children
Living Well With IBD

- Compliance with medication and treatment
- Keep follow-up appointments
- Eat a well-balanced diet
- Have a support system
Resource Used

- [www.ccfa.org](http://www.ccfa.org)