Shared Care of Patients with Inflammatory Bowel Disease

Laurie S. Conklin, M.D.
Inflammatory Bowel Disease Program
Children’s National Medical Center
IBD CAN MAKE GROWING UP A REAL PAIN

SOMEONE YOU KNOW MAY HAVE CROHN’S OR COLITIS.

It’s hard to be a kid when you have Inflammatory Bowel Disease (IBD). Unpredictable flares can have you sitting in the dark, the fun. Chances are, you know one of the nearly 1 in 200 Americans who suffer from the debilitating pain disruptions that come with Crohn’s disease and ulcerative colitis. The physical and emotional toll can be devastating.

The Crohn’s & Colitis Foundation of America is committed to helping those with IBD cope and to finding a cure. People with IBD can get back to being kids again. People with IBD can’t wait. Won’t you help someone you know?

Visit EscapeTheStall.com today.

#EscapeTheStall
The Spectrum of IBD

**CROHN’S DISEASE**
- Patchy inflammation
- Mouth to anus involvement
- Full-thickness inflammation
- Variable involvement
- Fistulas
- Abscesses
- Strictures
- Extraintestinal manifestations
- Increased risk of cancer

**ULCERATIVE COLITIS**
- Continuous inflammation
- Colon only
- Superficial inflammation
- Variable involvement
- Increased risk of cancer
- Extraintestinal manifestations

**Indeterminate colitis**
10%–15%
The etiology of IBD is multifactorial

- Intestinal Sensing of Bacteria
- Susceptibility Genes
- Diet?
- Geography?
- Stress?
- Immune System
- Modifier Genes

IBD
Global Incidence of Crohn’s Disease

Health Maintenance in IBD

- Growth/Nutritional Assessment
- Bone Health
- Mental Health
- Immunizations
- Health screenings
Malnutrition and Growth Failure

- Malabsorption
- Increased metabolic demand
- Decreased nutrient intake
- Inflammatory Cytokines (i.e. TNFα, IL-6)
- Corticosteroids

Conklin LS & Oliva-Hemker M, Exp Reviews Gastroent 2010
Growth Stunting in Crohn’s Disease

- Delayed bone age is common in CD
Growth Deficits

- Nutritional Failure:
  - Wt % crossing 2 percentiles
  - Weight loss ≥ 10%
  - Weight ≤ 10%

- Growth Failure
  - Height % crossing 2 percentiles
  - Height velocity < 3%
  - Height % < 3%
Diet and IBD

- Eating can cause significant symptoms in patients with IBD
- The search for alternate “natural” or complementary options
- No specific foods cause IBD or cause flares of disease
# Micronutrient Deficiencies

<table>
<thead>
<tr>
<th>Ulcerative Colitis</th>
<th>Crohn’s Disease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium</td>
<td>Vitamin D</td>
</tr>
<tr>
<td>Magnesium</td>
<td>Calcium</td>
</tr>
<tr>
<td>Iron</td>
<td>Vitamin B12</td>
</tr>
<tr>
<td>Vitamin D</td>
<td>Folate</td>
</tr>
<tr>
<td>Calcium</td>
<td>Magnesium</td>
</tr>
<tr>
<td>Folate (sulfasalazine)</td>
<td>Iron</td>
</tr>
<tr>
<td>Potassium</td>
<td></td>
</tr>
</tbody>
</table>
Dietary Tips

- Eat small, frequent meals
- Identify trigger and “safe” foods
- Keep a food journal
- When disease is under control, return to fiber-containing foods
Bone Health

- 10-40% of children with Crohn’s have bone mass deficits at diagnosis

- May affect attainment of peak bone mass
  - Risk of fracture
  - Slowed linear growth

- Bone modeling and remodeling is affected by pro-inflammatory cytokines
Bone Health

- Manage inflammation
- Optimize nutrition
- Weight bearing exercise
DEXA scan

- Patients with Crohn’s Disease, or exposure to steroids
- If low BMD, repeat in a year
- Low BMD and history of fracture → may benefit from a referral to a pediatric endocrinologist or Bone Health clinic
Vitamin D – 30 ng/ml

- Prevalence of Vitamin D deficiency in pediatric IBD = 34.6%

- Oral doses of 2,000 IU vitamin D(3) daily and 50,000 IU vitamin D(2) weekly for 6 – 12 weeks \(^1\)

\(^1\) Pappa et al. J Clin Endo Metab 2012: 97: 2134-42
Assessing Mental Health

- 25% of adolescents with IBD may display symptoms of depression

- **97% of these would have gone unrecognized without being queried**

- Depression correlated with pain, diarrhea, weight loss
Depression and IBD

- Cognitive Behavioral Therapy
- Hypnosis
- Family/patient support

Vaccinations

- All inactivated vaccines
  - Diptheria
  - Acellular tetanus
  - Pertussis
  - HBV
  - Haemophilus influenzae
  - Inactivated polio
  - Pneumococcus
  - Hepatitis A
  - Influenza
Avoid live vaccines when immunosuppressed

- (Prednisone > 20 daily or 2 mg/kg/day for at least 14 days)
- Immunomodulators (6MP, methotrexate)
- Biologics (infliximab, adalimumab)
Vaccine considerations

- MMR- avoid, live vaccine
- Varicella-- * check titers ahead of immunomodulation and vaccinate if time
- Hepatitis B- check HepB SAg and Ab before starting biologics
Ophthalmology visit yearly

- Uveitis
  - 6.1% pediatric Crohn’s with no ophthalmologic complaints had uveitis
  - Findings are independent of bowel inflammation
- Episcleritis
  - Tends to parallel bowel inflammation.
Dermatology visit yearly

- Increased risk for melanoma associated with IBD
  - Possible association with biologics
  - Absolute risk 57/100,000 patient years (44.1/100,000 in normal cohort)

- Non-melanoma skin cancer risk associated with IBD and thiopurines
  - Absolute risk 912/100,000 patient years (623/100,000 in normal cohort)
Adherence and Self-Management

- Non-adherence linked to disease severity and poor psychosocial functioning
- “How many doses of your medication have you missed this past week?”
- Behavioral, organizational, educational, family-centered interventions
Complementary and Alternative Medicine (CAM)

- In children with IBD, 43.6% use CAM in addition to prescribed medication
  - Spiritual intervention
  - Nutritional interventions
  - Herbal Remedies
  - Alternative Practices
Family Support

- Camp Oasis
- CCFA
- Parent support groups