IBD 101: An Introduction to Inflammatory Bowel Disease

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So...You were just diagnosed with IBD?
IBD 101

• Defining Inflammatory Bowel Disease
• Difference between Crohn’s and Ulcerative Colitis
• Symptoms
• Treatment
• Questions
Common Questions

• What is Inflammatory Bowel Disease/Crohn’s/Ulcerative Colitis?
• What caused my IBD
• Will I need medication for the rest of my life
The Immune System

- **Adaptive Defense**
  - Against specific pathogens or changed body cells
  - Defense cells in the blood: B lymphocytes
  - Antibodies
  - Defense cells in the tissue: T lymphocytes

- **Innate Defense**
  - Against foreign bodies, injuries, and pathogens
  - Bacteria-killing substances
  - Protection on the outside: the skin
  - Protection on the inside: all mucous membranes
  - First attack in the tissue: scavenger cells
Inflammatory Bowel Disease

• Two Major Types
  – Crohn’s Disease
  – Ulcerative Colitis
  – Indeterminate Colitis

• Causes
  – Genetics
  – Environmental
  – Overactive Immune response
Inflammatory Bowel Disease

The Spectrum of IBD

ULCERATIVE COLITIS
- Continuous inflammation
- Colon only
- Superficial inflammation
- Variable involvement
- Extraintestinal manifestations (pyoderma gangrenosum, primary sclerosing cholangitis)
- Increased risk of cancer
- No Granulomas

CROHN'S DISEASE
- Patchy inflammation
- Mouth to anus involvement
- Full-thickness inflammation
- Variable involvement
- Fistulas
- Abscesses
- Strictures
- Extraintestinal manifestations (erythema nodosum, iritis, uveitis, arthritis, apthous ulcers)
- Increased risk of Cancer
- Granulomas

Indeterminate colitis
10%–15%
Crohn’s Disease and UC
Crohn’s Disease - Symptoms

- Diarrhea (nonbloody)
- Abdominal pain
- Anemia
- Weight loss
- Fatigue
- Fever
- Fistulas
Crohn’s Disease
Crohn’s Disease

Crohn's Ileitis

Normal

Inflammation

Inflammation

Distended ileum

Stenosis

Stenosis

Fistula formation

Sigmoid colon
Crohn’s Disease

- Stricture
- Fistula
Crohn’s Disease

Relationship Between Clinical Symptoms and Endoscopic Indices at Presentation of Acute CD

Ulcerative Colitis - Symptoms

- Diarrhea – may be bloody
- Abdominal pain
- Urgency
- Weight loss
Extra-Intestinal Manifestations

- Arthritis
- Skin
  - Erythema nodosum
  - Pyoderma gangrenosum
- Mouth ulcers
- Eye inflammation
Skin Lesions in IBD

Erythema nodosum

Pyoderma gangrenosum

Pyoderma gangrenosum
Eye Inflammation

Diffuse episcleritis

Anterior uveitis in a patient with inflammatory bowel disease

Diffuse anterior scleritis
Diagnosis

- Colonoscopy
- Endoscopy
- CT
- MRI
- Capsule endoscopy
- Small bowel follow-through
Diagnosis
Diagnosis

• Normal colon
Diagnosis

- Crohn’s
Diagnosis

- Crohn’s pathology
Diagnosis

• Ulcerative Colitis
Diagnosis

• Ulcerative Colitis
Treatment

• Crohn’s
  – Steroids
    • Prednisone
    • Budesonide
  – Immunomodulators
    • Azathioprine
    • 6-mercaptopurine
    • Methotrexate
  – Biologics
    • Remicade/Infliximab
    • Humira/ Adalimumab
    • Cimzia/ Certolizumab
    • Entyvio/ Vedolizumab
    • Stelara/ Ustekinumab
Treatment

- Ulcerative Colitis
  - Steroids
    - Prednisone
    - Budesonide
    - Uceris
  - 5-ASA
    - sulfasalazine
    - Mesalamine
      - Lialda
      - Apriso
      - Etc
      - Canasa
      - Rowasa

- Biologics
  - Remicade/Infliximab
  - Humira/ Adalimumab
  - Cimzia/ Certolizumab
  - Entyvio/ Vedolizumab
  - Stelara/ Ustekinumab
Biologics

Intercepts of TNF-alpha cause your immune system to attack healthy cells in the gastrointestinal tract, leading to inflammation—the underlying cause of symptoms.

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Treatment

• Surgery
  – when disease is not controlled with medication surgery may be needed
  – Surgery can be curative for Ulcerative colitis
Treatment
Treatment

• Crohn’s Surgery
  – treat or remove fistulas
  – remove Strictures
  – drain fluid collections
Treatment
Treatment

• Routine Health Maintenance
  – Immunizations
  – Annual pelvic exam (women)
  – Skin checks
  – Depression and Anxiety Screening
  – Bone mineral density testing (certain patients)
  – Smoking cessation
Conclusion

• Types
  – Crohn’s
  – Ulcerative Colitis

• Autoimmune Disorder

• Crohn’s can involve the entire GI tract

• Ulcerative Colitis only involves the colon

• Multiple treatment options

• Surgery may be needed
Questions?