

# GI Grand Rounds

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## History of Present Illness:

- 40 y.o. Caucasian female with ulcerative colitis, diagnosed in 3/2009 by colonoscopy with biopsy in New Orleans, LA. She was initially managed with Remicade, which was discontinued due to persistent anemia. She is uncertain of the extent of her disease, but recalls diffuse colonic thickening on CT scans obtained, consistent with pancolitis. She underwent colectomy in 4/2009, with ileostomy and a retained rectum. In the following months, her postoperative course was complicated by Candida and MRSA wound infections requiring multiple hospitalizations. She moved to Houston in 6/2009, and presented to the Digestive Disease Center to establish care.

- The patient complained of increased ileostomy output for the past 4 months, consisting of unformed liquid stool, requiring frequent emptying of her external appliance up to 6-7 times per day. She stated increased output with meals, and denied any visible blood.
- She noted diffuse abdominal cramping, associated with meals, prompting early satiety, and decreased appetite. She denied N/V, hematemesis, or significant weight loss.
- She also stated the development of bright red rectal bleeding, with occasional passage of clots and mucoid discharge for the past 5-6 weeks. She denied the urge to defecate, stating that symptoms occurred at any time of day, prompting the use of sanitary pads. Her symptoms had begun to interfere with her profession, and activities of daily living.

### PMHx:

- Graves' disease s/p thyroidectomy 10 years ago, complicated by exophthalmos
- Ulcerative colitis s/p colectomy

### Surgical Hx:

- Colectomy with ileostomy & retained rectum
- Thyroidectomy

### FHx:

- Mother – DM 2, Graves' disease, CAD s/p MI
- Father – Glioblastoma multiforme

### Social Hx:

- Denies tobacco or illicit drug use
- Occasional weekend alcohol use
- Employed in a hospital
- No recent travel

### Allergies:

- NKDA

### Medications:

- Synthroid
- Ultram
- Multivitamin
- Folate

## Review of Systems:

General: No weight loss, fatigue, malaise

HEENT: No diplopia, blurred vision, tinnitus

CV: No chest pain, palpitations

Pulmonary: No SOB, DOE, wheezing

Gastrointestinal: Increased ileostomy output, with associated intermittent diffuse abdominal cramping, painful rectal bleeding with passage of clots and mucus. Denies N/V, hematemesis, odynophagia, dysphagia.

Musculoskeletal: No myalgias, recent trauma

Neurologic: No tremors, seizures

Endocrine: No temperature intolerance, diaphoresis

Integumentary: Increased erythema and pruritus surrounding her ileostomy. No jaundice, petechiae

## Physical Exam:

98.0F bp 112/62 HR 72 RR 12 Weight 147 lbs

General: NAD, AAO x 3, age appropriate, well-nourished

HEENT: PERRLA/EOMI, slight proptosis, oropharynx clear, no aphthous ulcers. No LAD, JVD, carotid bruits

CV: RRR, NL S1/S2, no murmurs

Pulm: CTA, no wheezes, rales

Abdomen: soft, nondistended, nontender to palpation. RLQ ileostomy with surrounding erythema, no vesicles, erosions, bleeding or purulence. Normal bowel sounds auscultated. No hemorrhoids or fistulas present.

Ext: No cyanosis, clubbing, edema

Skin: No jaundice, petechiae

Neuro: CN II-XII grossly intact, no tremors

Labs:

WBC 4.3

Hgb 11.0

Hct 27

Plts 404

MCV 80

Iron

% Sat

Sodium 139

Potassium 4.1

BUN 16

Creatinine 0.8

Calcium 9.1

Total Protein

Albumin

- Differential Diagnosis?
- Further Workup & Management?

## Serology:

- Positive tissue transglutaminase IgA Ab
- Positive antiendomysial IgA Ab
- Normal range anti-gliadin IgG & IgA
- Normal range total IgA levels

# Antrum



# Duodenum



# Duodenum



# Ileostomy



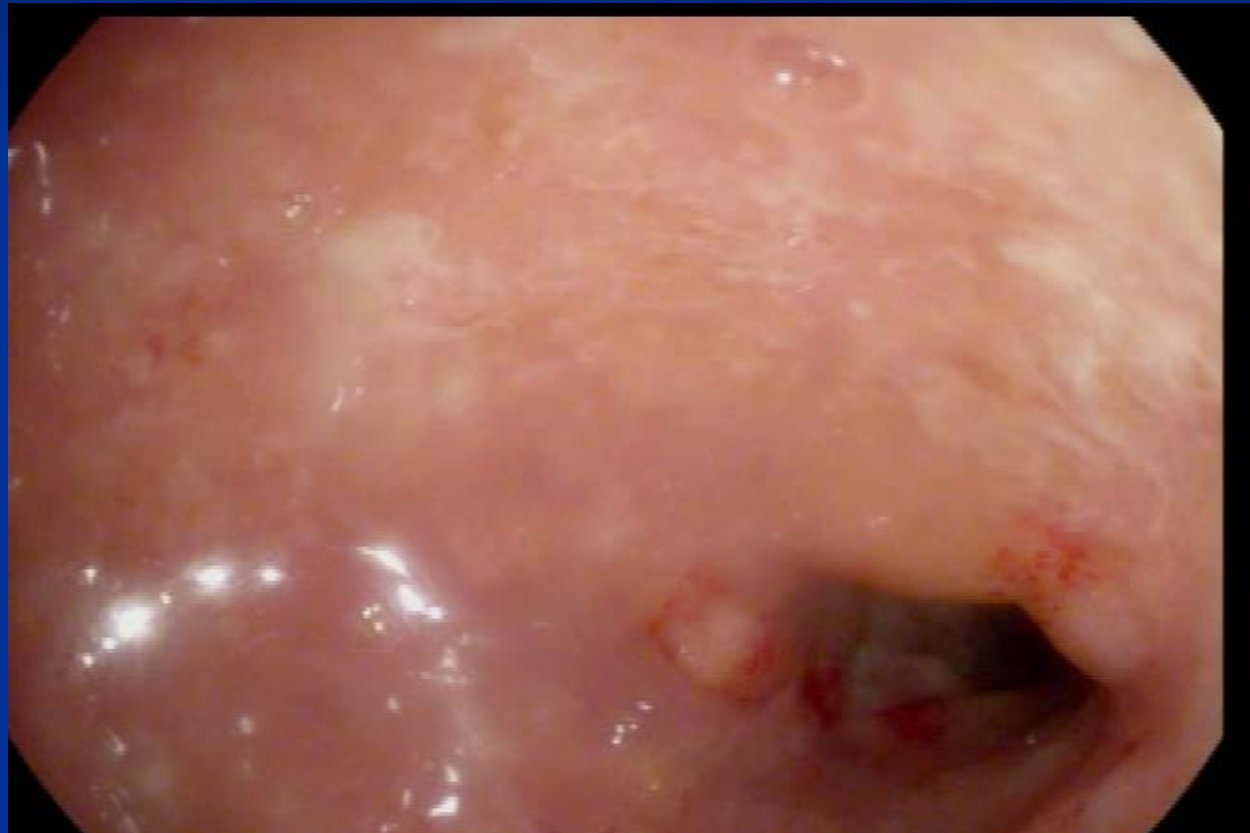
# Ileostomy



# Rectum



# Rectum



# Rectum



# Rectum



EGD: Normal examination s/p duodenal biopsies

## Proctoscopy & Ileostomy:

- Normal ileum ~20 cm
- Moderately active proctitis with pseudopolyp formation, fine granularity & friability of the rectum s/p random biopsies

## Pathology:

Duodenum: duodenal mucosa with markedly increased intraepithelial lymphocytes & focal villous blunting

Rectum: chronic colitis with severe activity,  
no granulomas or dysplasia

## Celiac Disease in Inflammatory Bowel Disease

- What is the incidence of Celiac disease in patients with IBD?
- Should patients with Celiac disease be screened for IBD?
- Should patients with IBD be screened for Celiac disease?

## Celiac Disease in Inflammatory Bowel Disease

- The prevalence of celiac disease is estimated to be around 1–2% in the general population.
- Median age of diagnosis in 4<sup>th</sup>-5<sup>th</sup> decades
- The prevalence of IBD is reportedly 5–10 times higher in celiac disease than in the general population
- Generally described in case reports involving patients with UC, Crohn's disease, and lymphocytic colitis

1. Gillberg R, et al. Chronic inflammatory bowel disease in patients with coeliac disease. *Scand J Gastroenterol* 1982;17:491–6.
2. Sanders DS, et al. Changing face of adult celiac disease: experience of single university hospital in South Yorkshire. *Postgrad Med J* 2002;78:31–3.

# A case of sequential development of celiac disease and ulcerative colitis

Dickey W. Nat Clin Pract Gastroenterol Hepatol. 2007 Aug;4(8):463-7.

- A 65 yo Caucasian woman presented with flatulence and weight loss, investigated by negative celiac antibody testing, EGD with normal duodenal biopsy.
- Subsequent endoscopy with biopsy 5 years later for evaluation of iron-deficient anemia demonstrated villous blunting, and patient successfully managed with gluten-free diet.
- New-onset development of diarrhea after 18 months symptom-free prompted repeat endoscopy & demonstrated ulcerative colitis

# Is there an association between celiac disease and IBD?

## A study of relative prevalence in comparison with population controls

Leeds JS, et al. Scand J Gastroenterol. 2007 Oct;42(10):1214-20.

- 305 patients with celiac disease, 354 with IBD and 601 healthy controls.
- (154 ulcerative colitis, 173 Crohn's disease, 18 indeterminate colitis and 9 cases of microscopic colitis)
- 10 celiac pts had biopsy-proven IBD (5 UC, 5 lymphocytic colitis)
- Of IBD pts, 3 had villous atrophy and +TTGA (2 pts + antiendomysial Ab)
- 5 controls had celiac disease, 1 UC, and 1 Crohn's

Prevalence of IBD in celiac disease was increased 10-fold compared with that in controls, while prevalence of celiac disease in patients with IBD was similar to that in control population.

## Prevalence of celiac disease in inflammatory bowel diseases: An IG-IBD multicentre study

Casella G, et al. Dig Liver Dis. 2009 Sep 26. doi:10.1016/j.dld.2009.08.005

- Italian Group for Inflammatory Bowel Disease conducted a multicentre study of 22 gastroenterology centers.
- 1711 patients (860 Crohn's, 791 UC, 60 indeterminate colitis) received serologic evaluation for anti-endomysial antibodies and anti-tissue transglutaminase antibodies.
- Nine of the 1711 patients (0.5%) had serologic & histologic diagnosis of celiac disease (6 UC, 3 Crohn's)
- Both EMA & TTGA were positive in eight patients
- One patient was positive for EMA, but negative for TTGA (celiac disease was not conclusively diagnosed in this pt)
- IgA deficiency was identified in five patients (negative EMA/TTGA) but none of them had celiac disease at endoscopy

Lower risk of celiac disease in IBD cohort in comparison to general population

# Followup

- Gluten-free diet
- Surgical consultation for re-anastamosis
- Asacol?

# Celiac Disease in Inflammatory Bowel Disease

1. Chakraborty, et al. Celiac disease and Crohn's disease. *Hosp Med.* 2003 Nov;64(11):684-5.
2. Kang, et al. Celiac sprue and ulcerative colitis in three South Asian women. *Indian J Gastroenterol.* 2004 Jan-Feb;23(1):24-5.
3. Schedel J, et al. Association of Crohn's disease and latent celiac disease: a case report and review of the literature. *Int J Colorectal Dis.* 2005 Jul;20(4):376-80.
4. Gillett HR, et al. Prevalence of celiac disease in collagenous and lymphocytic colitis. *Can J Gastroenterol* 2000; 14:919-21.