Clinico-Pathologic Conference: May 26th, 2020, 8:00 AM – 9:00 AM

Chief Residents: Conor Merritt, MD & Abigail Stein, MD

Chief Complaint: Abdominal Pain

Dec 2018: Initial Presentation to Clinic (Index Visit)

- 16-year-old male with a persistent umbilical hernia presenting with 2 months of right-mid abdominal pain that occurs after eating
- Has been evaluated by OSH ED and CCHMC surgical team in the last 2 months:
  - Outside ED (~3 weeks prior to index visit): Seen for abdominal pain. Found to have a slight elevation of AST and ALT. Abdominal US was read as normal. Abdominal CT showed a persistent umbilical hernia and thickened subfascial tissue but otherwise unremarkable. Pt noted to have bleeding at site of umbilicus.
    - Started on Prilosec
  - CCHMC Surgery Consult (7 days prior to index visit): Referred for recurrent pain in the setting of umbilical hernia and thickened sub fascial tissue on CT scan.
    - Sent for outpatient amylase, lipase, repeat hepatic profile
    - Recommended HIDA scan
    - If HIDA normal recommended GI follow up
- On day of index presentation, patient reported abdominal pain localized to mid-right abdomen and epigastrium which was intermittent, brought on by eating and associated with nausea without vomiting or change in stool pattern. The pain is increasing in frequency.

Pertinent ROS

- Constitutional: Weight loss (1 kg in last week, <10 lbs in last 2 months), fatigue, no fevers
- HENT: no rhinorrhea or nasal congestion. No conjunctival injection.
- Respiratory: No cough, pleuritic CP, or SOB. No WOB.
- GI: Intermittent, pulsating, throbbing epigastric pain worse with meals, daily soft stools. Nausea present, no emesis.
- GU: no dysuria, or hematuria.
- Hematology: no easy bruising/bleeding.
- Neurologic: No headaches, seizures, weakness, paresthesias, or ataxia.
- MSK: no myalgias, arthralgias, or arthritis.
- Skin: Bleeding from umbilical area with umbilical swelling, no rashes
- Allergy/Immunology: no hives or recurrent infections.

Index Visit Physical Exam

- *Vitals:* **Temp** 36.8C **HR** 82 **RR** 16 **BP** 137/57 **SpO2** 99% **Weight** 74.8 kg, **Height** 179.2cm
- *General*: Comfortable, interactive, well appearing
- *Skin*: Warm, well perfused, no rashes
- *HEENT:* Anicteric sclera, MMM, posterior pharynx non-erythematous
- *Lungs*: CTAB
- *Cardiac*: RRR, normal S1/S2, no murmur
- *Abdomen*: soft, not distended, diffuse mild to moderate tenderness to palpation, worse in RUQ. LUQ notably nontender, normal bowel sounds, no organomegaly, no masses, no palpable stool, hernia not noted on exam
- *GU*: normal male external genitalia, no hernias
- *Lymphadenopathy*: no adenopathy
- *Musculoskeletal/Ext*: normal muscle bulk with no contractures or deformities
- *Neurological*: grossly normal

PMH/PSH/Meds/Allergies

Umbilical Hernia
Mild Intermittent Asthma
Acne – On Doxycycline
Previous Severe tick associated illness requiring 2-week ICU stay at OSH
Previous T&A
Meds: Doxycycline, Prilosec
Allergies: Egg White, Rondec (carbinoxamine maleate + pseudoephedrine)

Family History

Maternal Grandmother with anti-phospholipid disorder

Social History

Lives at home with his mother, father and 3 younger siblings. Sophomore in high school. Plays baseball, basketball and tennis.

Immunizations

Stated as up to date

Initial Workup (Index Visit)

4.9	16.6 / 187	47.6

Segs: 56%
Bands: 0%
Lymphs: 34%
Mono: 7%
Eos: 1%
Baso: 1%

Protein 7.8		29 AST
Alb 4.7		21 ALT
Tbili 0.5		149 Alk Phos

Amylase: 79
Lipase: 39

Compared to previous OSH ED visit, had improved LFTs

Initial Imaging: HIDA scan with gallbladder ejection fraction 94% (normal >39%). Normal hepatobiliary imaging.

Encounter Disposition/Plan:

Recommended continued outpatient follow up for an endoscopy.
A fecal Lactoferrin was ordered, if high planned to change to an EGD/colonoscopy.
Inflammatory markers ordered.

Jan 2019: Follow up 3 weeks from initial visit

Labs Obtained:
TTG IgA < 2
IgA 169
CRP <0.29
ESR 3
PMN CD64: 2.91
Fecal Lactoferrin 83

Imaging:
CT Abdomen/Pelvis W/ Contrast
- No cause of abdominal pain identified
- Spleen: Few tiny punctate calcifications in the spleen, likely granulomas

First EGD
- Esophageal lining normal in appearance throughout, without thickening, furrowing, exudate, erythema, or erosion
- Gastric mucosa with diffuse erythema, subepithelial spots of deep red (petechiae?), diffuse edema without discrete ulceration
- H. pylori immunohistochemistry stain negative
- The duodenal mucosa normal in appearance except for one thickened fold at the turn in the bulb and some prominent lacteals in the 2nd and 3rd portion

Pending:
One sample of antral mucosa was sent for rapid urease test (CLO testing)

Plan:
Start Zantac
Repeat EGD in 1 month

Feb 2019: Follow up visit 1 month from EGD

Labs from prior visit resulted:
- Urease (Clo Test) biopsy: Negative

Patient without clinical improvement since last visit

Colonoscopy and Second EGD Performed:

EGD/Colonoscopy performed:
- Gastric body with erythematous marks and mild fish scale appearance but no nodularity, erosions or ulceration
- Antral and prepyloric areas with some erythema
- Esophageal lining normal in appearance
- Duodenal mucosa normal in appearance
- No mucosal abnormalities identified in the ileum or colon

Surgical Pathology:
- GI biopsy, duodenum 3rd/duodenal bulb: Chronic duodenitis
- GI biopsy, body/antrum: Chronic active gastritis
- GI biopsy, distal esophagus: No diagnostic abnormality

Biopsy Results:
- Duodenum/Proximal esophagus/terminal ileum/rectum: No diagnostic abnormality
- Body/Antrum/ Distal esophagus: Chronic gastritis and florid chemical gastropathy, B lymphocytes and plasma cells with focal damage to gastric glands. H. pylori immunohistochemistry stain negative.
- Ascending/transverse colon and cecum: Melanosis coli

Labs:
EBV Profile: EBV IgM AB – Negative, EBV IgG AB/EBNA – Positive

Protein 7.2	41 AST
Alb 4.3	31 ALT
Tbili 0.7	125 AlkPhos

Ferritin 12.8
ESR: 3
TSH: 0.530
Free T4: 1.32
Intrinsic Factor Blocking Antibody: Negative

Based on the results of this EGD/Colonoscopy and an additional lab test, a final diagnosis was made. What additional lab test confirmed the diagnosis and what is your final diagnosis?

Prior to Dr. Bernieh's pathology presentation, please submit your responses to the questions shown below using either the QR code or this link: https://forms.gle/97ntdG6ZzqVVx31BA. The winner will be the audience member with the correct test and diagnosis who is in the earliest level of training.

CLINICO-PATHOLOGIC CASE GRAND ROUNDS - May 26th, 2020

Name: _____

Level of Training/Current Position: _____

What additional lab test confirms the diagnosis? _____

What is your final diagnosis? _____

I had prior knowledge about this case (circle one): Yes No