CHRONIC DIARRHEA: Beyond Bugs and Drugs
Emiley Chang, MD, Jorge A. García, MD, MS, FACP
University of California Davis Medical Center, Sacramento, CA

OBJECTIVES
1. Discuss presentations of acute and chronic mesenteric ischemia, as well as colonic ischemia.
2. Compare diagnostic imaging modalities for intestinal ischemia.

HISTORY AND PHYSICAL
• 71-year-old woman with history of peripheral arterial disease presented with mild, intermittent diarrhea for one year.
• Exacerbated 3 months ago after antibiotics.
• 6 bowel movements per day, after meals.
• Mild cramping, acute 30 lb weight loss.
• No fever, hematochezia, melena, sick contacts, travel, relief with fasting.
• Soft periumbilical bruit on abdominal exam. No tenderness, distension, or masses.

INITIAL LABS AND STUDIES
• WBC 13, potassium 3.0, bicarbonate 30
• Negative Clostridium difficile toxin assay

CASE PRESENTATION

CLASSIC PRESENTATION
CHRONIC MESENTERIC ISCHEMIA
Rare. Dull, cramping, postprandial pain in first hour. Subsequent food overspill, weight loss. Exam may be unremarkable except for abdominal bruit.

ACUTE MESENTERIC ISCHEMIA
Rapidly progressive, severe periumbilical pain out of proportion to exam, delayed bleeding. Subacute presentation in mesenteric vein thrombosis.

COLONIC ISCHEMIA
Most common form of intestinal ischemia; many causes. Often elderly patients with nausea, vomiting, rapidly worsening left-sided abdominal pain, and frequent bloody stools over a 24-hour period.

DIAGNOSTIC IMAGING

PLAIN ABDOMINAL X-RAYS
CMI AMI CI
Nonspecific and frequently normal. Ileus signs, thumbprinting, bowel thickening, pneumatosis intestinales (advanced). Vessel calcifications.

DOPPLER ULTRASONOGRAPHY

CT ABDOMEN/PELVIS WITH CONTRAST; CT ANGIOGRAPHY

MAGNETIC RESONANCE ANGIOGRAPHY
CMI AMI
Newer, more expensive, less available than CT angiography. Highly sensitive for mesenteric venous thrombosis?

ANGIOGRAPHY
CMI AMI CI

COLONOSCOPY
CI
Often required to establish diagnosis. No bowel prep, to avoid worsening ischemia. Biopsies help distinguish from other etiologies.

REFERENCES

ACKNOWLEDGMENTS
We would like to thank Dr. Maya Mitchell and Dr. Ripple Sharma for their invaluable comments on our abstract and poster.

DISCUSSION

CHRONIC DIARRHEA is a challenging clinical problem with a broad differential diagnosis including infectious, inflammatory, malabsorptive, endocrinologic, and iatrogenic processes as well as dysmotility. Our patient with chronic mesenteric ischemia had an unusual presentation in that her chief complaint was diarrhea, not abdominal pain.

Risk factors for mesenteric ischemia include atrial fibrillation, congestive heart failure, peripheral arterial disease, hypercoagulable states, and previous aortobifemoral bypass. In acute mesenteric ischemia, timely diagnosis requires a high index of suspicion. Labs such as serum lactate and amylase may help with diagnosis, but levels often only rise after progression to bowel necrosis. Prompt recognition of gangrenous or perforated bowel is critical given high mortality rates even after surgical resection.

In acute mesenteric ischemia, timely diagnosis requires a high index of suspicion. Labs such as serum lactate and amylase may help with diagnosis, but levels often only rise after progression to bowel necrosis. Prompt recognition of gangrenous or perforated bowel is critical given high mortality rates even after surgical resection.

In acute mesenteric ischemia, timely diagnosis requires a high index of suspicion. Labs such as serum lactate and amylase may help with diagnosis, but levels often only rise after progression to bowel necrosis. Prompt recognition of gangrenous or perforated bowel is critical given high mortality rates even after surgical resection.