

## Introduction

- Cocaine is an illicit stimulant that blocks the reuptake of monoamines and causes vasoconstriction.
- Gastrointestinal complications of cocaine use vary in presentation and are associated with high mortality.
- A high index of suspicion is necessary for accurate and timely diagnosis and management.

## Case Presentation

- Female patient in their 30s
- Past medical history: anxiety, asthma, depression, esophagitis, and remote history of opioid use disorder
- Chief complaint: abrupt onset of severe abdominal pain, nausea, vomiting, and dark, tarry diarrhea
- Vitals: afebrile and hypertensive
- One sick contact with self-limiting gastroenteritis
- Labs: lactic acid 2.9, AST 61, ALT 57
- Urine drug screen: positive for cocaine, confirmed by patient
- CT abdomen and pelvis with contrast: thickening of the ascending and proximal transverse colon with mesenteric vascular fullness
- Physical exam: Diaphoresis a tender abdomen with guarding, worse in the epigastrium
- Treatment: supportive care with intravenous fluids, pain control, and anti-emetics
- Three days unchanged
- CT angiography of the abdomen: resolution of prior findings
- Labs: lactic acid 3.1, AST 184, ALT 133
- Discharged home



Figure 1

Multiple small bowel loops and proximal large bowel show wall edema/thickening and hypoenhancement—mild mesenteric congestion. A central filling defect is seen at the superior mesenteric artery post-middle colic artery branch.

Table 1. Differential Diagnoses with Expected Findings and Patient Findings

Differential Diagnoses	Laboratory and Exam Findings						
	Hgb	WBC	Lactic Acid	AST/ALT	Abdominal Pain	Temperature	GI Bleed
Viral Gastroenteritis	-	↑	-	-	diffuse	↑	no
Peptic Ulcer Disease	↓	-	-	-	epigastric	-	yes
Pancreatitis	-	-	-	-	epigastric, positional	-	no
Mesenteric Ischemia	-	-	↑	-	out of proportion	-	yes
Patient Presentation	-	-	↑	↑	epigastric, out of proportion	-	yes

Hgb=hemoglobin; WBC=white blood cells; AST=aspartate transaminase; ALT=alanine transaminase; GI=gastrointestinal

## Discussion

- Presentation of cocaine-induced mesenteric ischemia can vary from acute abdominal pain with or without bloody diarrhea, to shock, gastrointestinal hemorrhage, and death.
- Radiographic findings on CT are often non-specific and demonstrate bowel thickening.
- Prompt diagnosis and astute physical examination is key for diagnosis and proper management.
- The patient's persistent abdominal pain out of proportion to exam and abnormal laboratory values were suggestive of transient mesenteric ischemia secondary to cocaine use and vasospasm.

## Conclusion

- This case highlights the importance of a thorough social history, clinical gestalt and avoidance of anchoring.
- It demonstrates the importance of continual re-evaluation of the differential when a patient's overall clinical picture is not entirely attributable to the working diagnosis.

## References

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