TACE Induced Ischemic Colitis



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INTRODUCTION

- Transarterial chemoembolization (TACE) is a locoregional treatment used in patients with hepatocellular carcinoma (HCC)
- Utilized in patients who 1) are not candidates for surgical resection or 2) as a bridge to liver transplant
- Entails injecting a chemotherapeutic agent into a branch of the hepatic artery to cut off blood supply to the tumor, through particle embolization
- There is currently no case of TACE induced ischemic colitis published in Pubmed
- We present a case of ischemic colitis in the setting of recent TACE procedure

CASE REPORT

- 65-year-old female with history of HCC underwent an outpatient TACE procedure for a 3.6 cm liver lesion
- She developed severe abdominal pain soon after procedure and was hospitalized
- On day 2 of hospitalization she developed significant hematochezia with elevated lactic acid at 5.8 mmol/L
- CT abdomen/pelvis: mild wall thickening and pericolonic fat stranding in the ascending colon concerning for acute colitis
- CT angiography: patent abdominal aorta and all major branches
- CSP: multiple ulcers and erythema stretching from cecum to ascending colon suggestive of ischemic colitis
- Pathology: superficial mucosal erosion and necrosis, crypt atrophy, lamina propria hemorrhage with hyalinization; consistent with acute ischemic colitis

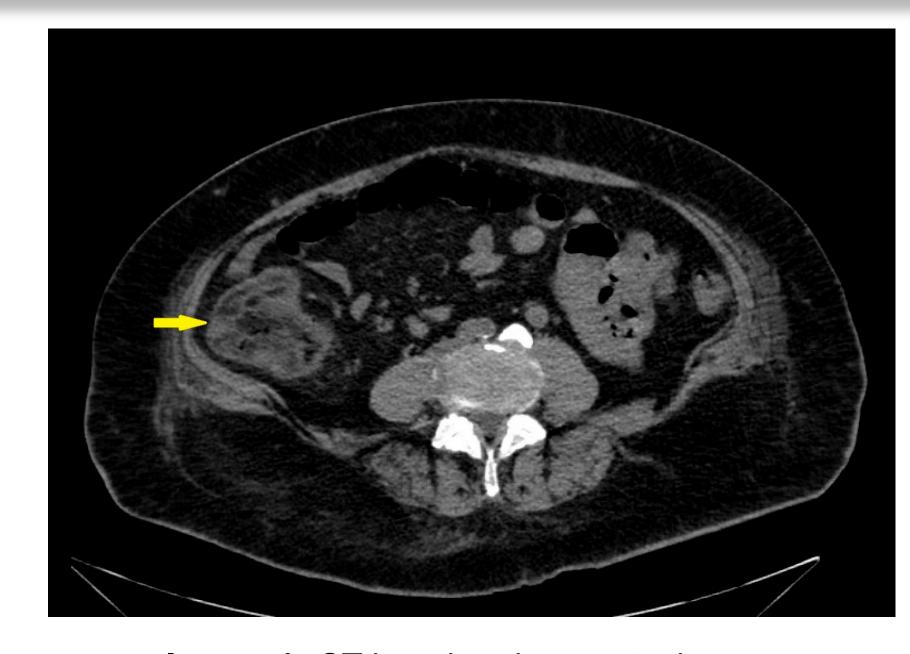


Image 1: CT imaging demonstrating ascending colon inflammation

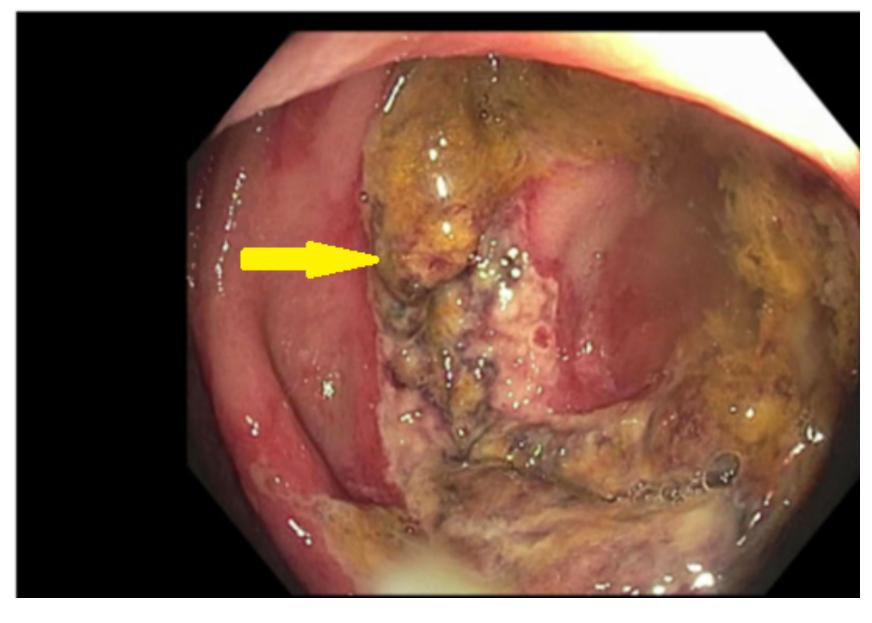


Image 2: Colonoscopy image demonstrating ischemic changes near appendiceal orifice

CLINICAL COURSE

- Treated conservatively
- No further episodes of hematochezia
- Discharged home and doing well on follow up clinic visits

DISCUSSION

- Postembolization syndrome is most common adverse effect of TACE procedure, seen in 60-80% of patients
 - Related to either 1) tumor necrosis or 2) ischemic damage to normal liver parenchyma
- No reported cases of ischemic colitis after TACE
 - One case of GI ulceration after TACE has been reported
- Presentation may have occurred due to regurgitation of embolized particles into superior mesenteric arterial circulation leading to hypoperfusion of colon
- Should consider Ischemic Colitis in differential diagnosis in patients presenting with hematochezia after TACE

REFERENCES

- 1. Tasneem, Abbas Ali, et al. "Adverse events following transarterial chemoembolization for hepatocellular carcinoma and factors predicting such events." *J Pak Med Assoc* 63.2 (2013): 239-244.
- 2. Nam, Hee Chul, Bohyun Jang, and Myeong Jun Song. "Transarterial chemoembolization with drug-eluting beads in hepatocellular carcinoma." *World journal of gastroenterology* 22.40 (2016): 8853.
- 3. Kim, Shin II, et al. "Duodenal perforation and esophageal ischemia following transarterial chemoembolization for hepatocellular carcinoma: A case report." *Medicine* 95.27 (2016).