

# "Could Sigmoid Diverticulitis, Drug Induced Liver Injury and Drug Induced Pancreatitis Occur Simultaneously?"

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### Introduction

- Sigmoid diverticulitis presents with left lower quadrant abdominal pain, fever and elevated inflammatory markers. Lifetime prevalence is 10%-25% in patients with diverticulosis<sup>1</sup>.
- Drug Induced Pancreatitis can be defined by criteria proposed by Badalov et al - features of acute pancreatitis in the presence of an offending agent, absence of common etiological causes; re-challenge with offending agent could be considered<sup>2</sup>.
- Drug Induced Liver injury is a diagnosis of exclusion. It is classified as predictable or unpredictable (idiosyncratic) $^{3,5}$ .

# **Clinical Presentation**

- 72 year old female with PMH significant for GERD, diverticulosis, and inflammatory arthritis presented to the ED complaining of abdominal pain, bloody diarrhea and fatigue for 1 week. Notably, she had just started a course of sulfasalazine.
- Patient was a nondrinker and denied OTC medications.
- Patient had underwent cholecystectomy in the past.
- ROS was unremarkable.
- Vitals stable except for sinus tachycardia HR-110/minute
- Abdominal examination was significant for generalized tenderness without rigidity or involuntary guarding.
- Viral Hepatitis panel was negative.
- Serum Calcium and Iron studies were within normal limits.
- CT abdomen and pelvis with IV contrast sigmoid diverticulitis( as per modified Hinchey classification Grade 0). There was no evidence of biliary ductal dilatation.
- Antibiotics for diverticulitis initially on piperacillin-tazobactam followed by transition to amoxicillin-clavulanic acid
- Pain management for diverticulitis and pancreatitis.
- She completed 7 day course of antibiotics.
- Patients diet was advanced as tolerated.
- Sulfasalazine was discontinued and added to patient's allergy list.





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#### Image

#### Image 1:CT scan abdomen and pelvis with IV contrast showing sigmoid diverticulitis

# Discussion

- Pathogenesis of diverticulitis- stasis or obstruction of diverticulum, alteration of gut microbiome, chronic inflammation, alterations in neuromusculature, local tissue ischemia and microperforation<sup>1</sup>.
- Modified Hinchey Classification has been used to categorise the severity of diverticulitis<sup>1</sup>.
- Drug Induced Pancreatitis is difficult to diagnose as patients may not always have the clinical features<sup>4</sup>.
- Idiosyncratic DILI can be further classified by the pattern of liver injury - Cholestatic, Hepatocellular or Mixed<sup>3</sup>.

# Conclusion

- This is a unique case in which 3 separate pathologies occurred simultaneously.
- As per literature review we could find any case similar to this.
- With the help of this case we wish to highlight the uncommon pathologies such as drug induced pancreatitis and drug induced liver injury.

### References

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