

A Rare Case of Drug-induced Pancreatitis

Kourosh Shargani*, Caleb V Wutawunashe, Anu Menon

Northwell Lenox Hill Hospital, New York, NY. 100 E 77th St, New York, NY 10075, USA

*Corresponding author: Kshargani@northwell.edu

Received April 02, 2021; Revised May 05, 2021; Accepted May 13, 2021

Abstract Acute pancreatitis is an inflammation of the pancreas that can be caused by many etiologies. Drug induced pancreatitis is one of the rarer causes. This case will show an unusual presentation of acute pancreatitis that may have been caused by methylprednisolone or colchicine use. Both medications have been linked as a rare cause of drug induced pancreatitis.

Keywords: Pancreatitis, Colchicine, Methylprednisolone, Gout, Drug-induced

Cite This Article: Kourosh Shargani, Caleb V Wutawunashe, and Anu Menon, "A Rare Case of Drug-induced Pancreatitis." *American Journal of Medical Case Reports*, vol. 9, no. 8 (2021): 434-435. doi: 10.12691/ajmcr-9-8-13.

1. Introduction

Acute pancreatitis is an inflammatory condition of the pancreas that is typically categorized based on etiology, the most common being gallstone obstruction and alcohol abuse [1]. Drug-induced pancreatitis only represents about 0.1-2% of cases [1]; however, it serves as an increasingly important ailment since management centers around removal of the offending agent. Failure to recognize the catalyst can result in critical delays and have fatal repercussions. Here, we present a case of drug-induced pancreatitis spurred by corticosteroid and colchicine use.

2. Case Presentation

A 74-year-old female presented to the emergency room with one day of epigastric pain, nausea and vomiting. The month prior, the patient developed painful gout in her first toe and was started on 0.6 mg colchicine daily. Given lack of symptomatic improvement, she was prescribed a six-day taper of methylprednisolone. After only two days of treatment (a total 44 mg methylprednisolone), she began to develop the above gastrointestinal symptoms. The patient's past medical history was significant for peptic ulcer disease, hypertension, hypothyroidism, and hyperlipidemia. Longstanding home medications included Pantoprazole, Levothyroxine, Losartan, and Rosuvastatin. She denied any alcohol or tobacco use. On presentation, physical exam was notable for epigastric tenderness to palpation and non-tender erythema of the right hallux. Laboratory studies were significant for a lipase >3000 U/L, triglycerides of 181 mg/dL, normal kidney function, and normal electrolyte levels. CT Abdomen illustrated acute

pancreatitis with no obstruction/dilation of the biliary ducts. Abdominal ultrasound revealed hepatic steatosis with no signs of cholelithiasis. The patient received IV fluids and pain control. In addition, colchicine and methylprednisolone were discontinued as they were suspected to be the cause of her pancreatitis. Within two days, the patient had complete resolution of her symptoms.

3. Discussion

The patient was evaluated for the most common causes of pancreatitis; however, imaging was negative for any hepatobiliary pathology, lab-work was un-revealing, and she had no history of alcohol use. Since she was recently started on new medications, drug-induced pancreatitis was of utmost concern. Colchicine and corticosteroids both have reported associations with pancreatitis, with colchicine being a far less common cause. Colchicine works by inhibiting tubulin and lowering the inflammatory process during a gout flare. It can cause side effects in those with renal or hepatic dysfunction due to altered drug metabolism, leading to overdose. In rare cases, it has been shown to cause acute pancreatitis even with therapeutic doses of colchicine [3]. Meanwhile, corticosteroid use leading to pancreatitis is more often described, typically in a dose-dependent fashion with development usually around 4 to 14 days after starting [2]. Corticosteroids can affect the pancreas by increasing the viscosity of pancreatic secretions and delaying emptying, leading to inflammation, and altering lipid and calcium metabolism [2]. Interestingly, this patient developed acute pancreatitis after two days of methylprednisolone use with concurrent colchicine use. Although unclear whether it was definitively the colchicine or methylprednisolone that caused the condition, both medications have been linked to rare cases of acute pancreatitis.

References

- [1] Minupuri A, Patel R, Alam F, et al. (August 06, 2020). *Steroid-Induced Pancreatitis: Establishing an Accurate Association Poses a Challenge*. *Cureus* 12(8): e9589.
- [2] Sabre A, Guthrie MM, Maleknia R. *Acute necrotising pancreatitis derived from low-dose corticosteroid use: an important reminder of clinical management*. *BMJ Case Rep*. 2015; 2015: bcr2015209325. Published 2015 Jul 6.
- [3] Ting JY. *Acute pancreatitis related to therapeutic dosing with colchicine: a case report*. *J Med Case Rep*. 2007 Aug 12; 1: 64.



© The Author(s) 2021. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0/>).