

Case of Cholangiogram Induced Acute Liver Injury Disease



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Introduction

Acute liver injury following endoscopic retrograde cholangiopancreatography (ERCP) is a rare occurrence. There have been rare cases reporting cholestatic liver injury after ERCP (3-6). We report a case of hepatocellular liver injury after the use of contrast during an intraoperative cholangiogram without biliary etiology noted on follow-up ERCP.

Case Description

A 49 year-old Hispanic female with a history of type 2 diabetes and chronic kidney disease presented to the hospital with midepigastic abdominal tenderness.

Admission: Found to have acute cholecystitis on the right upper quadrant ultrasound.

-Underwent laparoscopic cholecystectomy with intraoperative cholangiogram that was suggestive of a retained stone with use of 10mL of contrast agent Iohexol (Omnipaque)

Hospital Day 1: She underwent ERCP that revealed an edematous major papilla. Cholangiogram showed mildly dilated common bile duct. Sphincterotomy was performed with removal of the retained stone. A balloon sphincteroplasty was also performed.

Two days later: Presented to the hospital for persistent itching. She denied any abdominal pain.

-She had a right upper quadrant ultrasound and CT abdomen and pelvis consistent with surgical changes status post cholecystectomy with no acute findings.

-MRCP revealed no intrahepatic or extrahepatic biliary ductal dilation or choledocholithiasis. Further endoscopic interventions were not deemed necessary at this time. Workup of hepatitis A, B, and C were unremarkable.

-Her liver functions gradually up trended throughout the hospitalization, but, due to improvement of her symptoms with symptomatic management, she was discharged home to follow-up with a primary care physician and surgery.

Two weeks later: Outpatient follow-up with gastroenterology, she denied abdominal pain and endorsed resolution of itching.

Two months later: Followed up with her primary care physician for an annual physical with laboratory revealing liver function within normal limits.

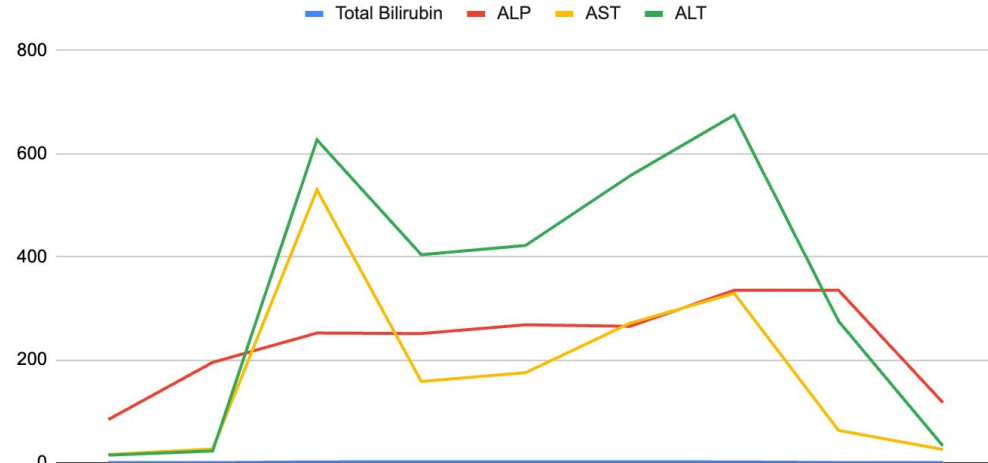
Discussion

-Prior cases of drug induced liver disease, reveal cholestatic pattern in the setting of contrast agents after undergoing ERCP (1,2).

-In these cases, iodinated contrasts, similar to the contrast used in our patient

-There have been a total of about 10 cases that have revealed cholestatic liver injury in the setting of ERCP that resulted in a benign course with complete resolution of liver function and good outcomes (2,5).

The mechanism of liver injury has been speculated but overall remains unknown. Some have postulated liver injury being idiosyncratic (5).



	Admission	HD1	HD2	Two days later	RD1	RD2	RD3	Two weeks later	Two months
T. bili	0.4	0.5	1.8	2.1	2	2.1	1.8	0.7	0.4
ALP	84	195	252	251	268	265	335	335	117
AST	16	27	530	158	175	271	329	63	26
ALT	15	23	627	404	422	557	675	275	33

References:

Importance to Medical Practice

1. Consider hepatocellular pattern, 2. Reimage prior to further endoscopic intervention. 3. Higher likelihood of good prognosis with symptomatic management and allowing time for the liver to recover from injury

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