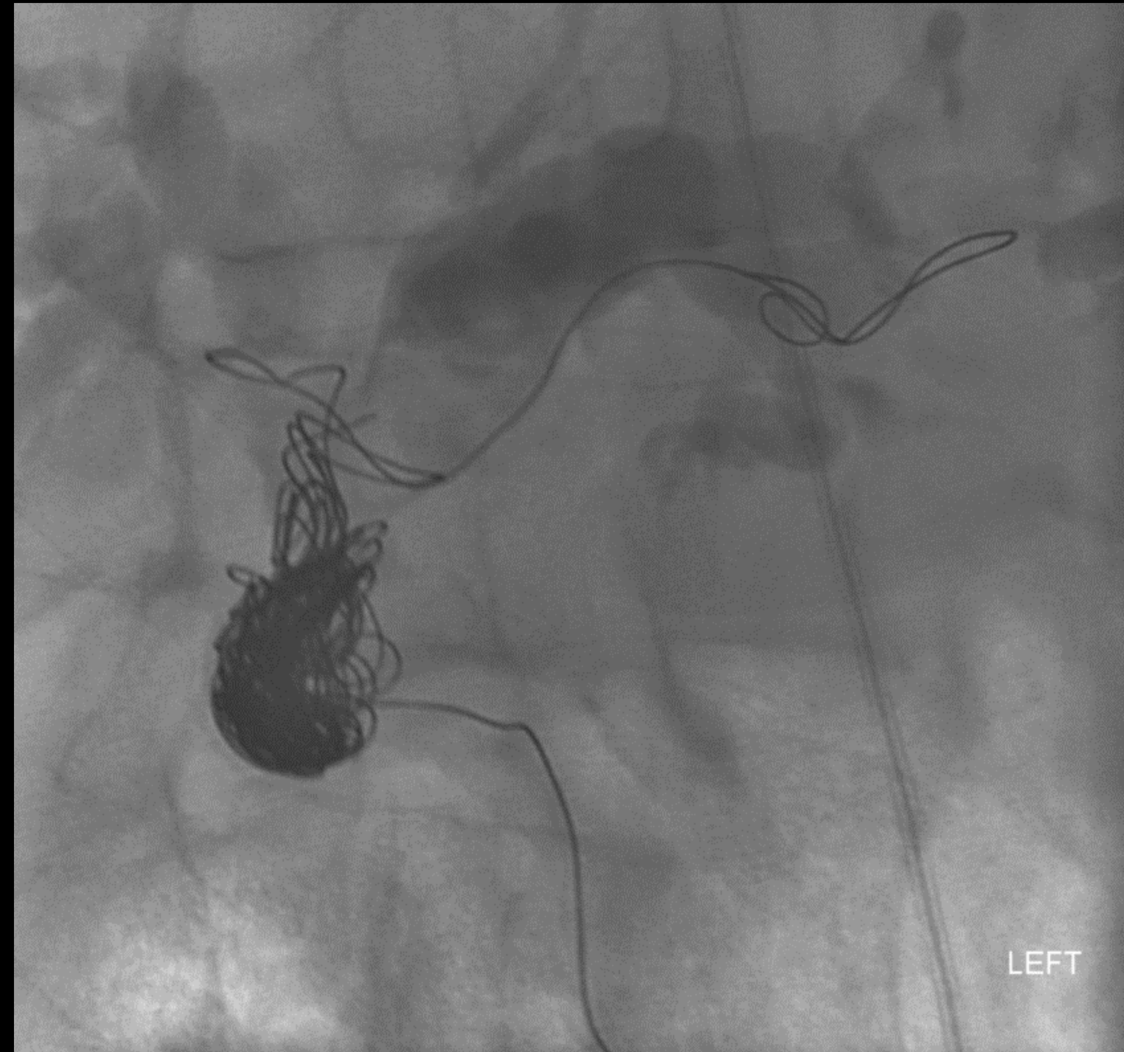
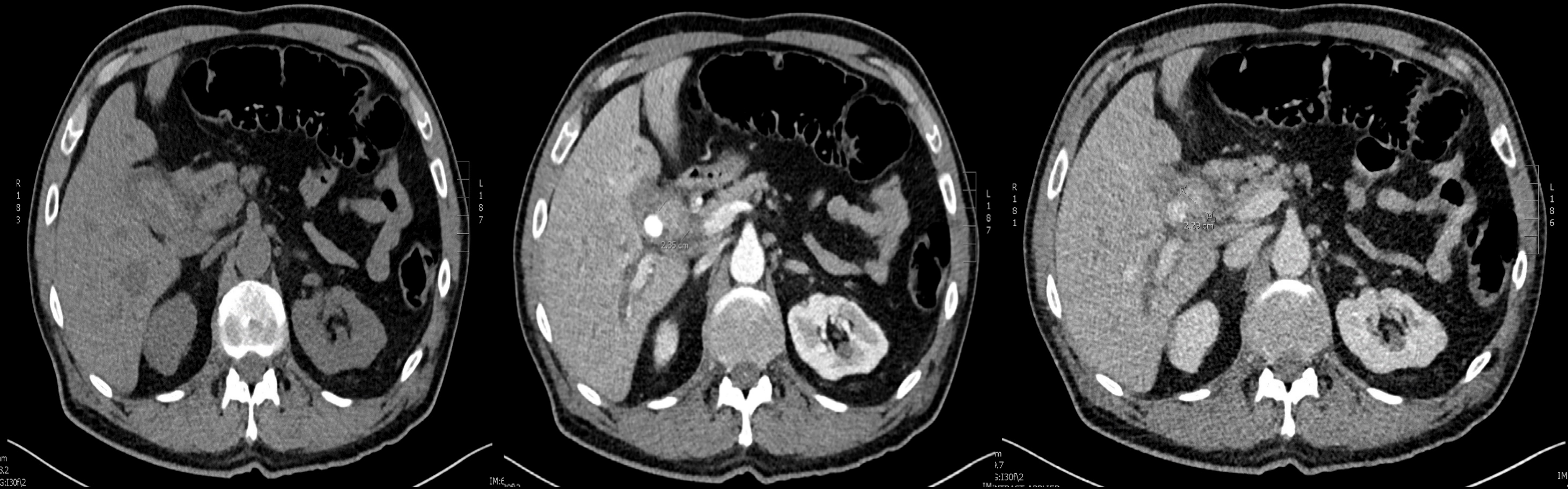
Hepatic artery pseudoaneurysm
Coil migration

- 72 yo male patient presented for biliary drain exchange.
- Past medical history of biliary cholangiocarcinoma.

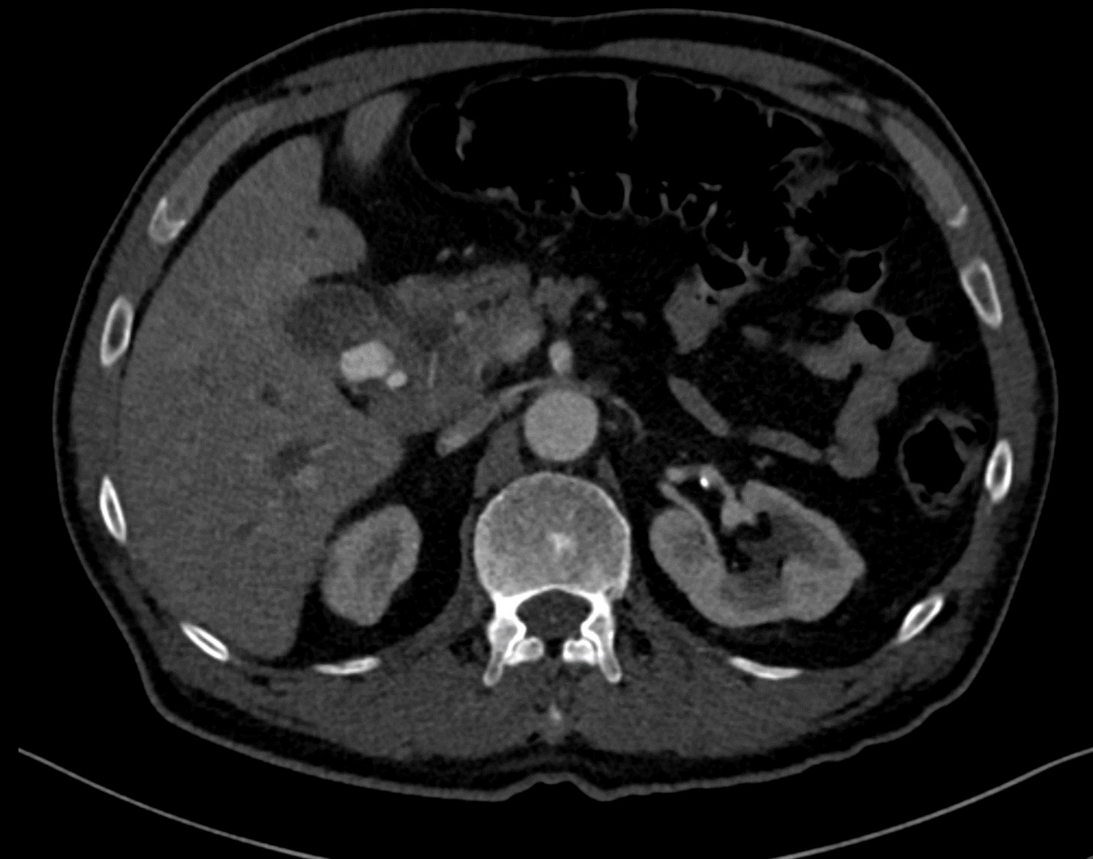


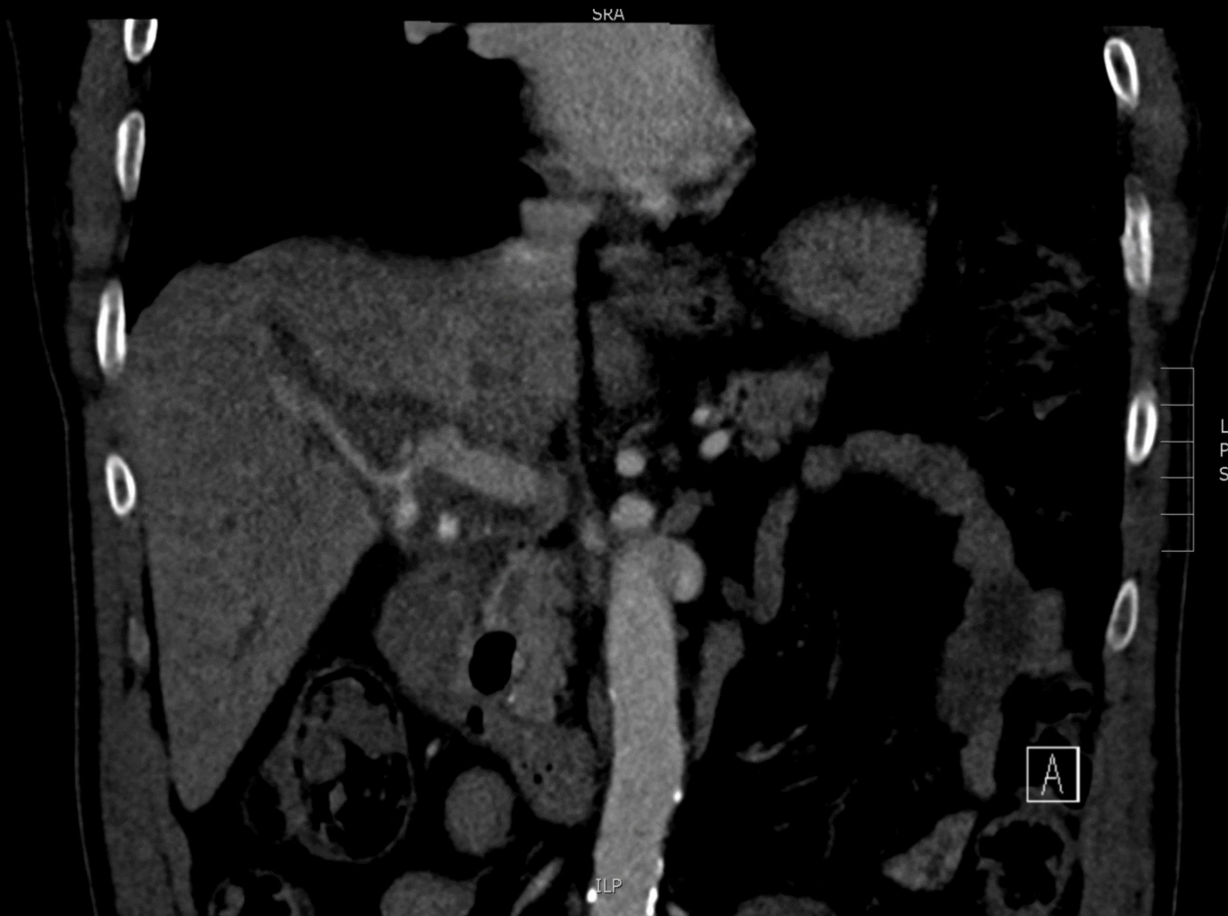
- Admitted May 2019.
- May 27th 2019, US ? Cholecystitis and ascending cholangitis.
- May 29th 2019, Failed ERCP.

CT Triple phase 30/05/2019

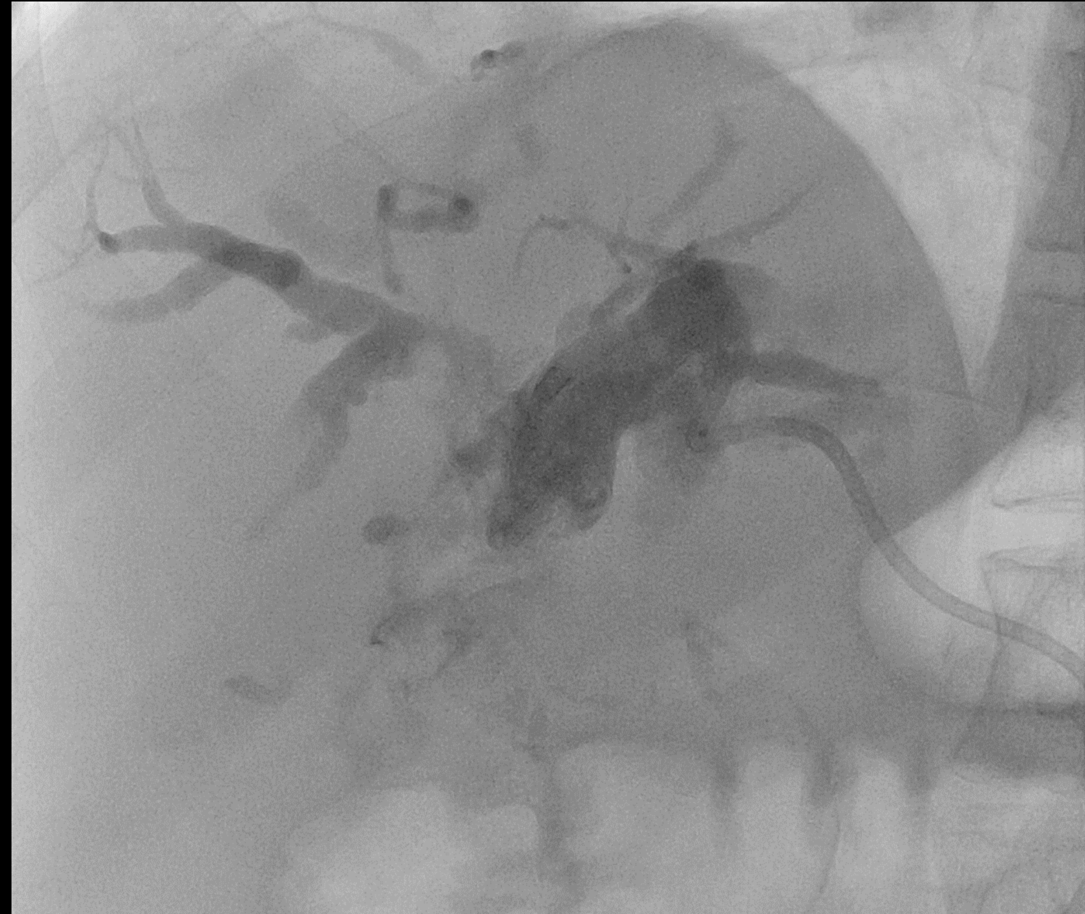


Reason for Exam: RULE OUT BILIARY NEOPLASMS ON ERCP-Admit DX:CHOLANGITIS
Report:
There is an ill-defined enhancing area measuring approximately 2 cm in diameter adjacent to the neck of the gallbladder, the expected area of the cystic duct. IMPRESSION: Cholangiocarcinoma



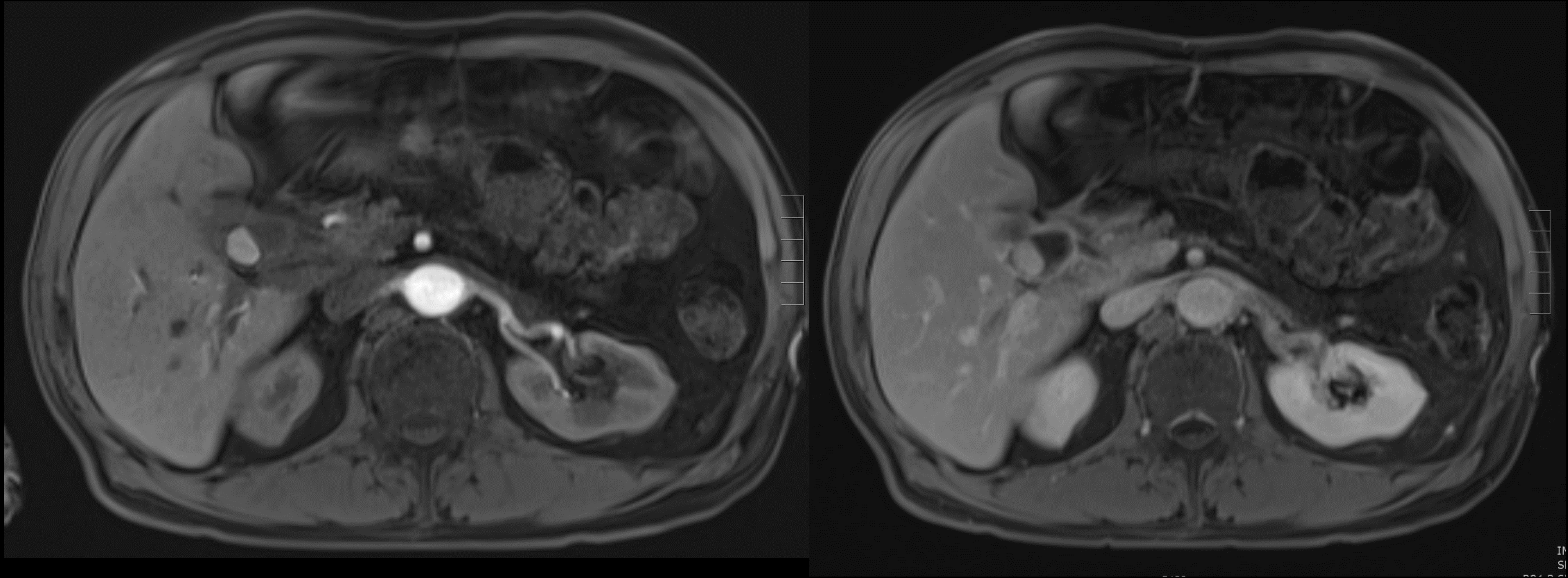

SRA
L
P
S
A
ILP

External biliary drain 30/05/2019



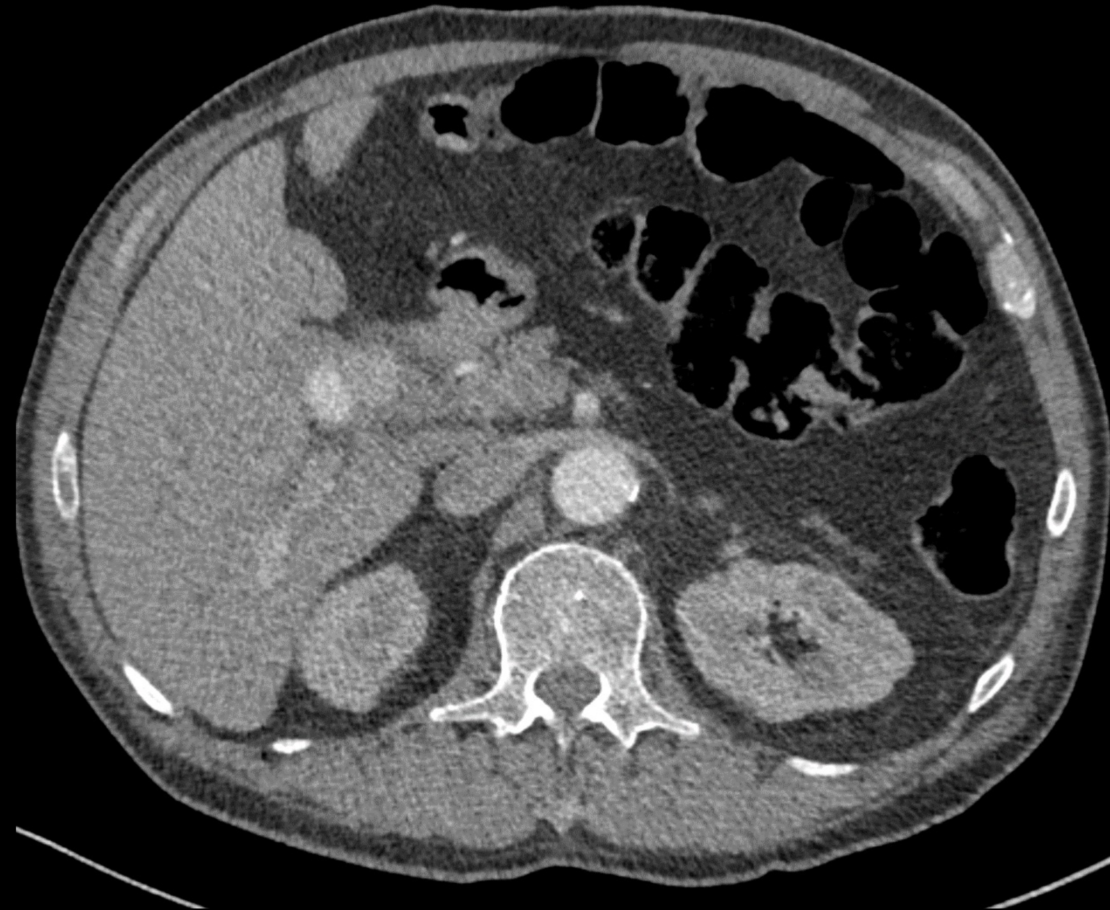
Reason for Exam: PERC DRAIN INSERTION POST ERCP INCREASED ABDOMINALPAIN AND FEVER AND LFT-
Admit DX:CHOLANGITIS

MRI 31/05/2019

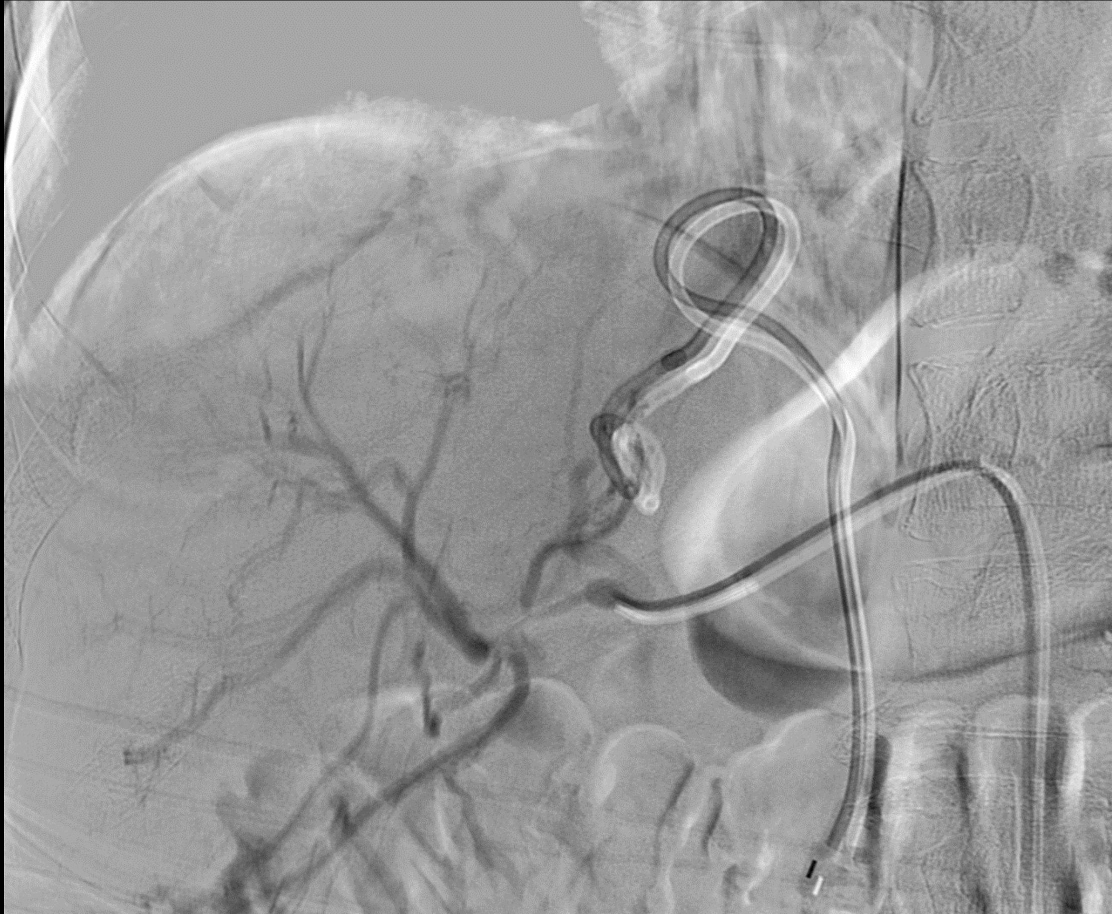


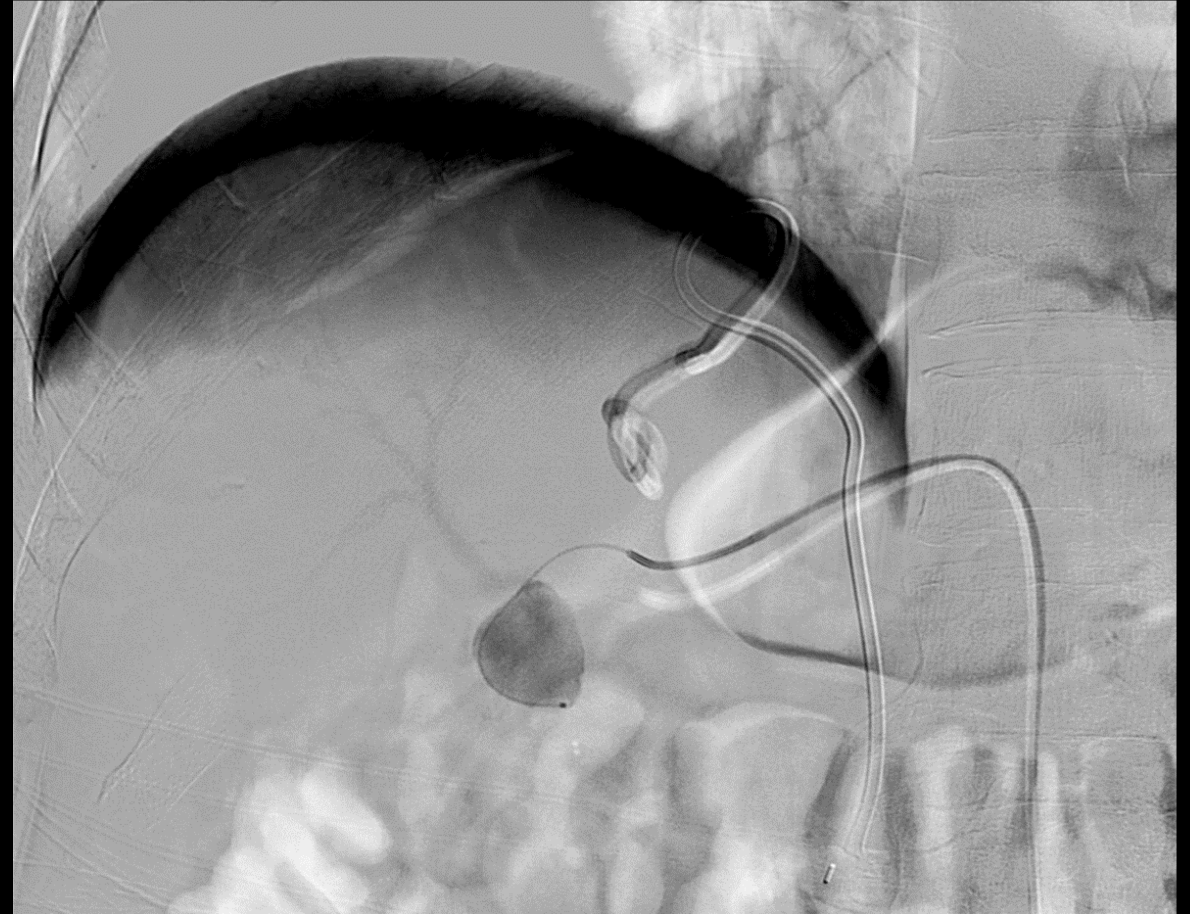
Reason for Exam: TO ASSESS BILIARY ASSOCIATED SOFT TISSUE MASS-Admit DX:CHOLANGITIS

CT Chest 31/05/2019

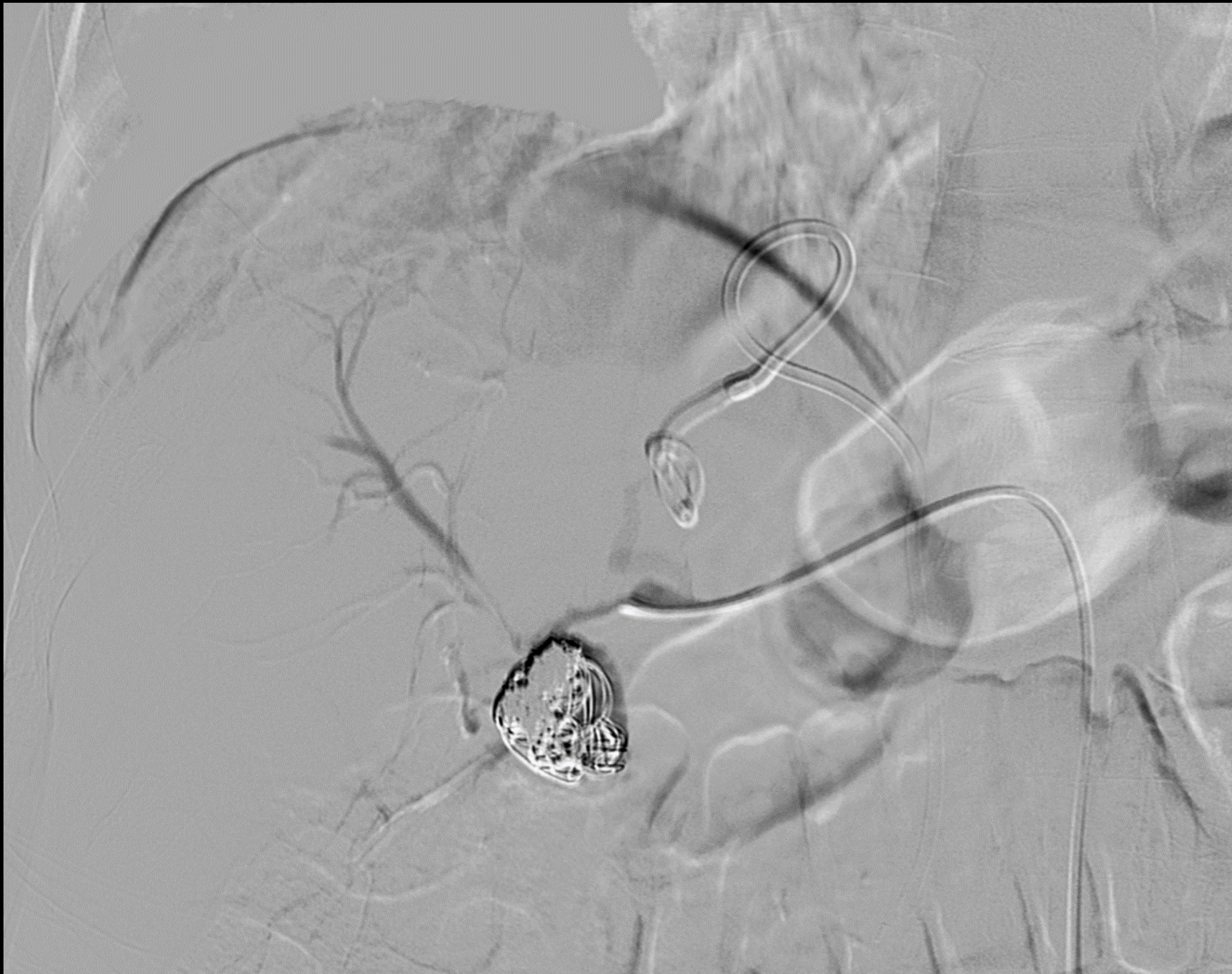


Mesenteric angiogram – 01/06/2019

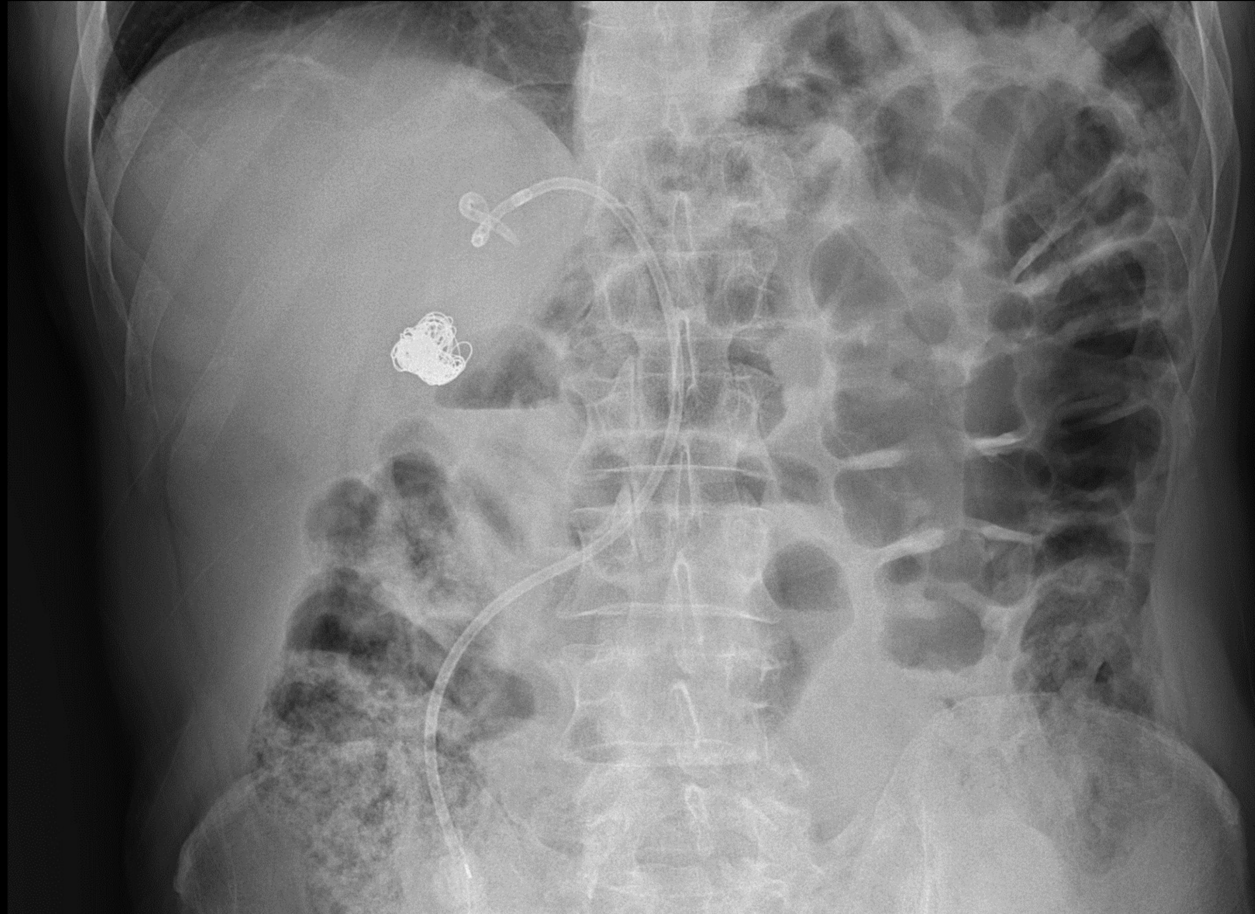




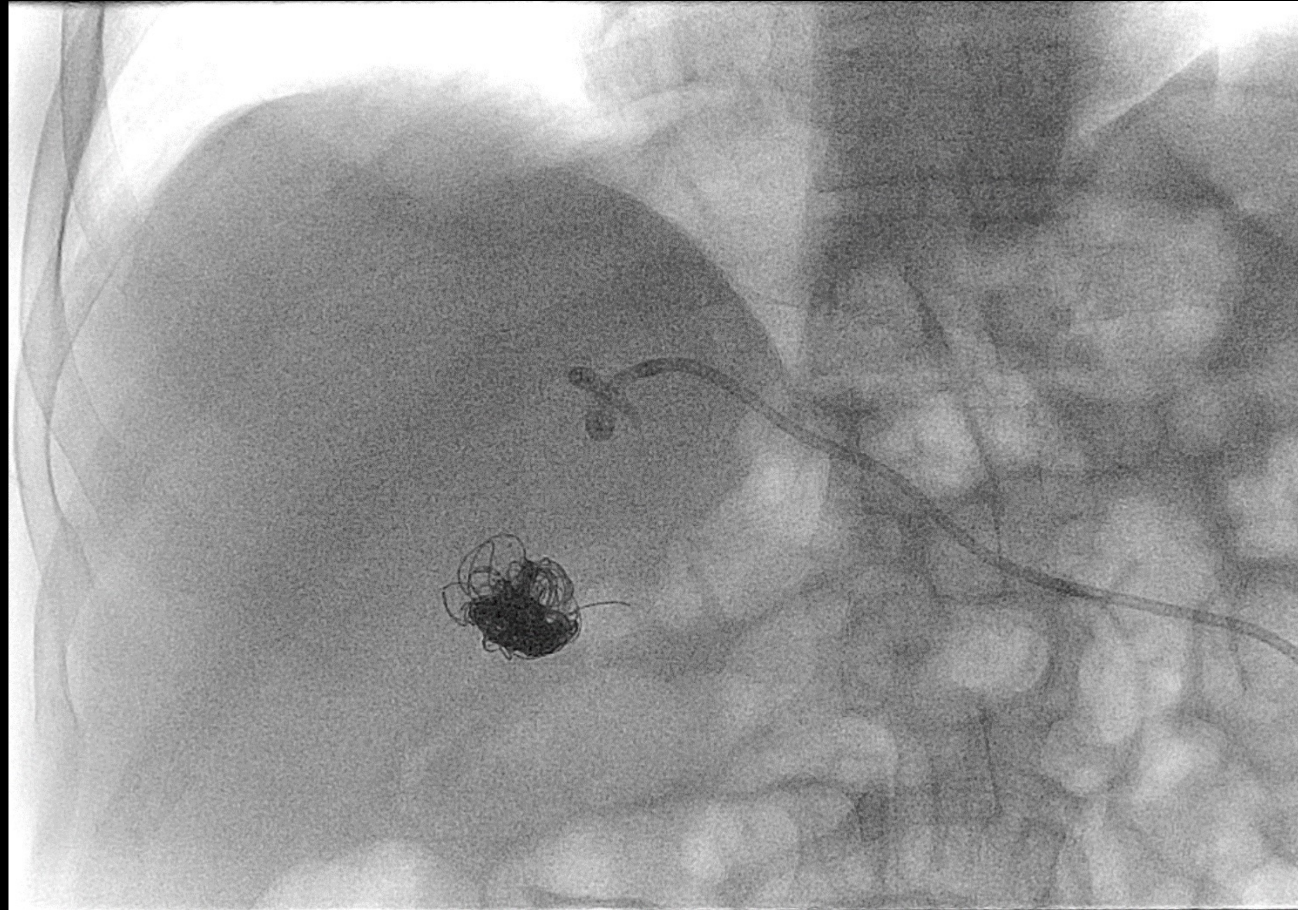
Reason for Exam: ANGIOEMBOLIZATION STAT,BILARY DUCT BLEEDING,HYPERYTENSIVE, NEW DIAGNOSE CHOLAGIO CA-Admit DX:CHOLANGITIS



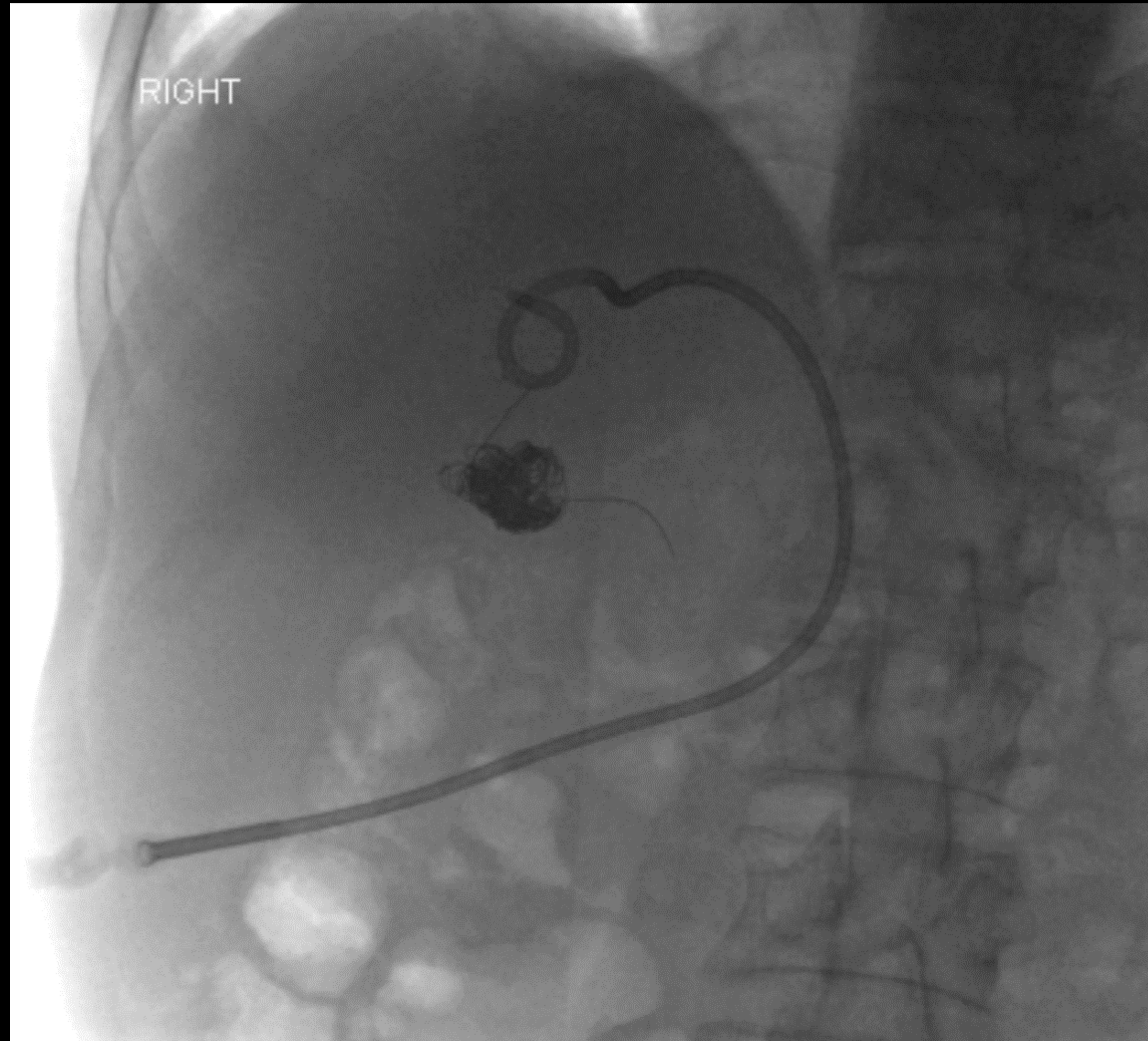
AXR 10/02/2020



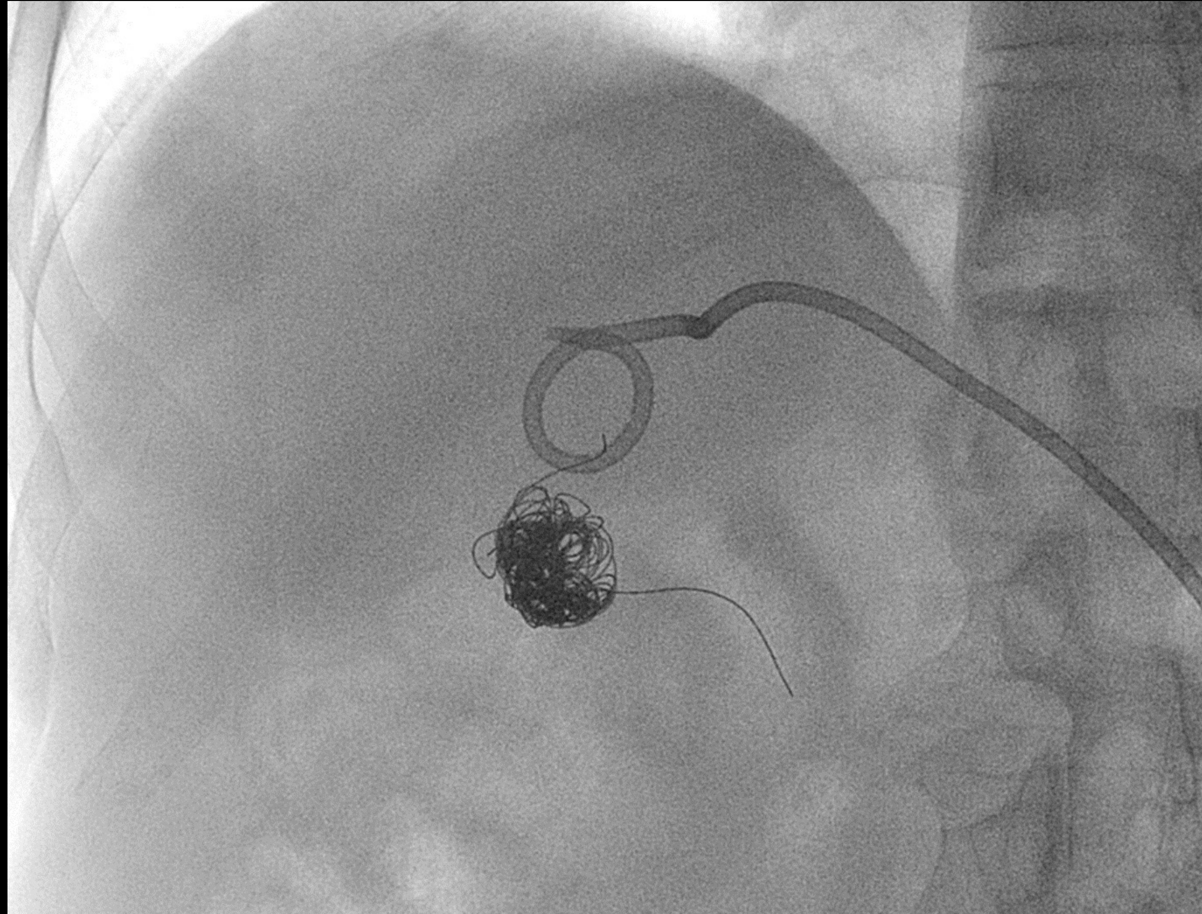
Catheter exchange 12/07/2020



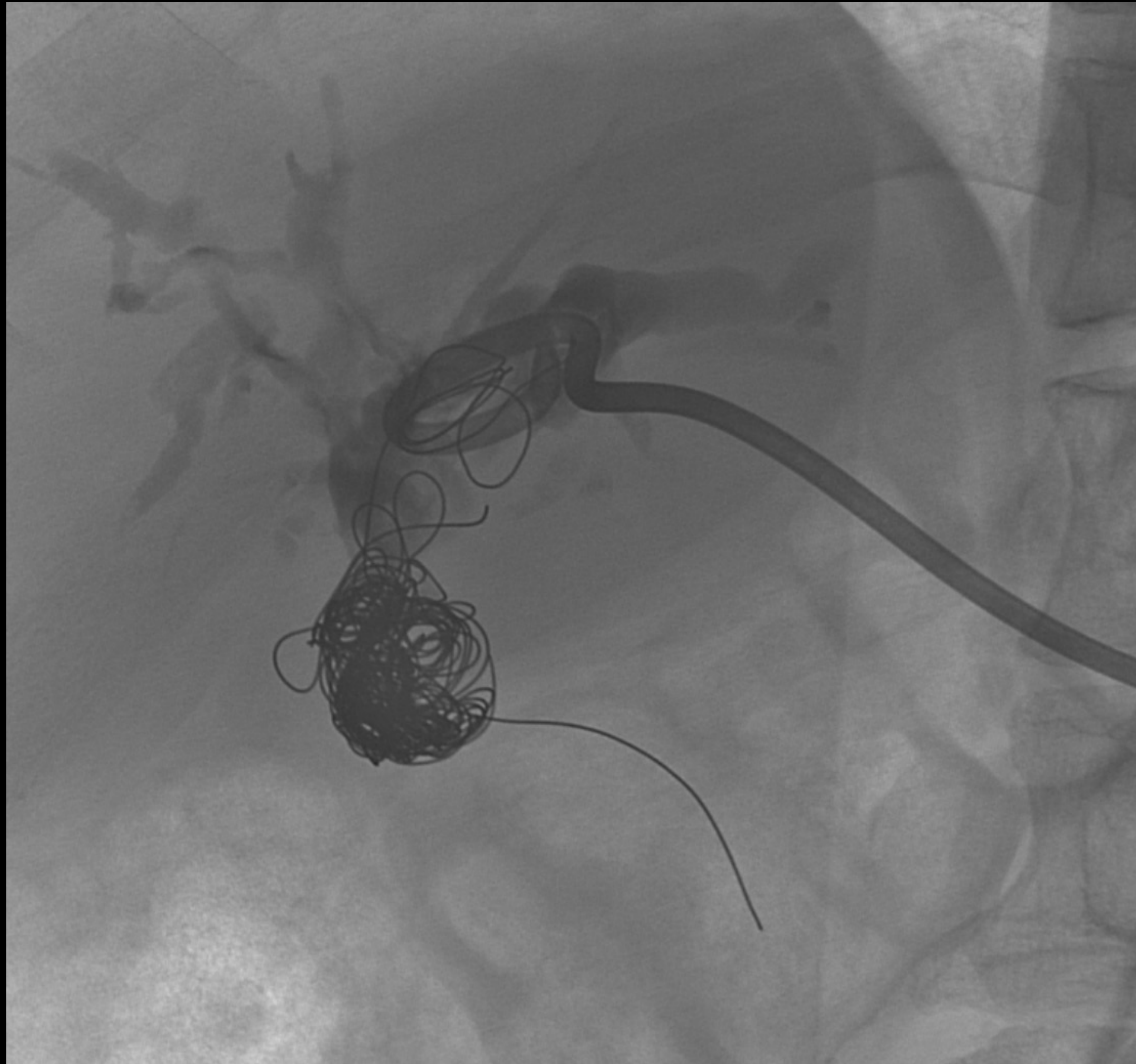
Catheter exchange 08/08/2020



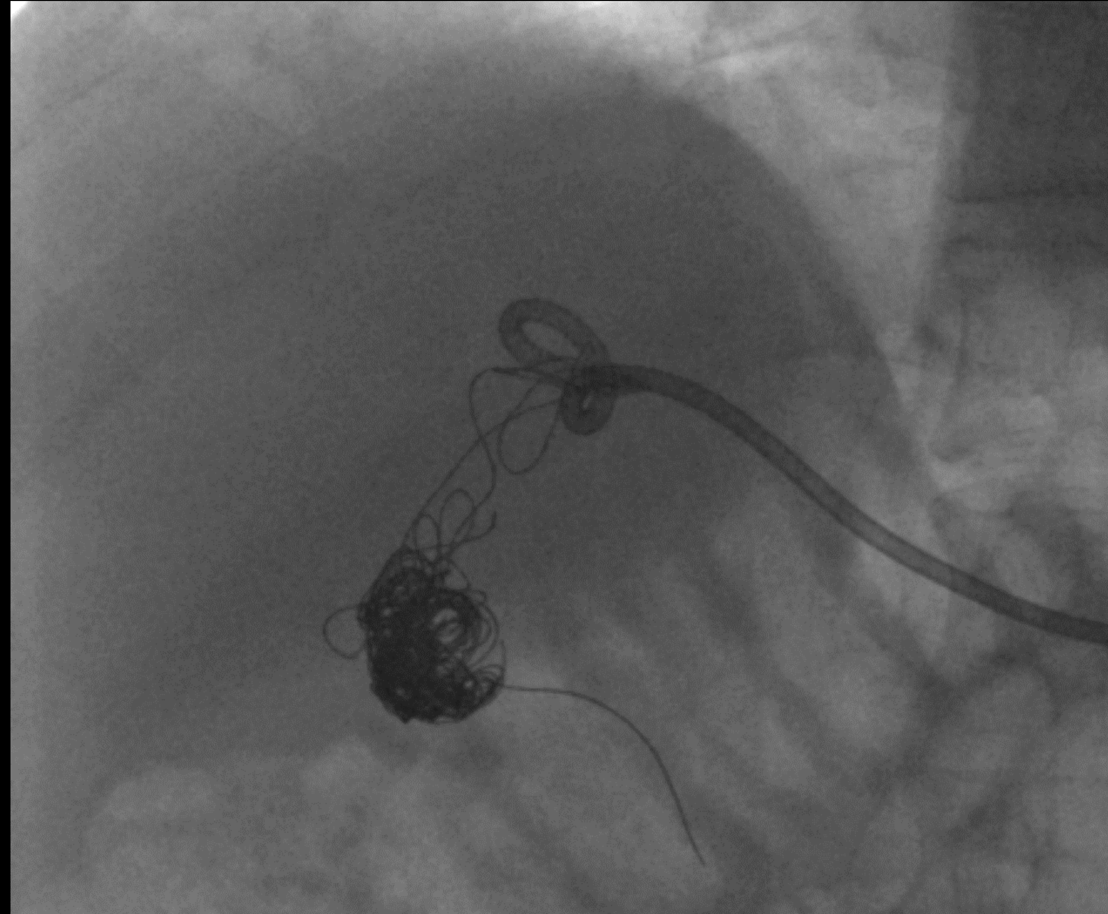
Catheter exchange 15/10/2020



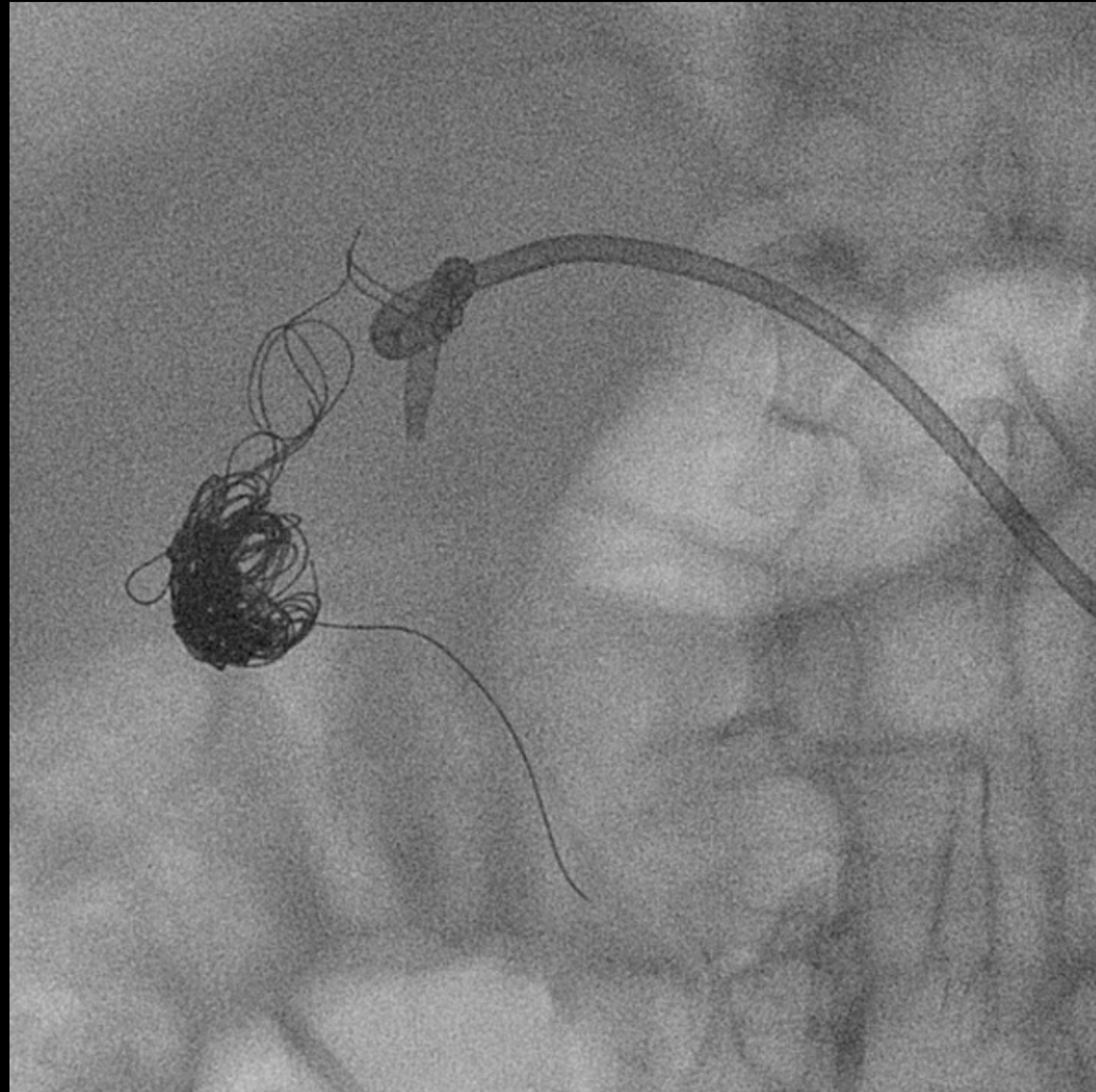
Catheter exchange 18/12/2020



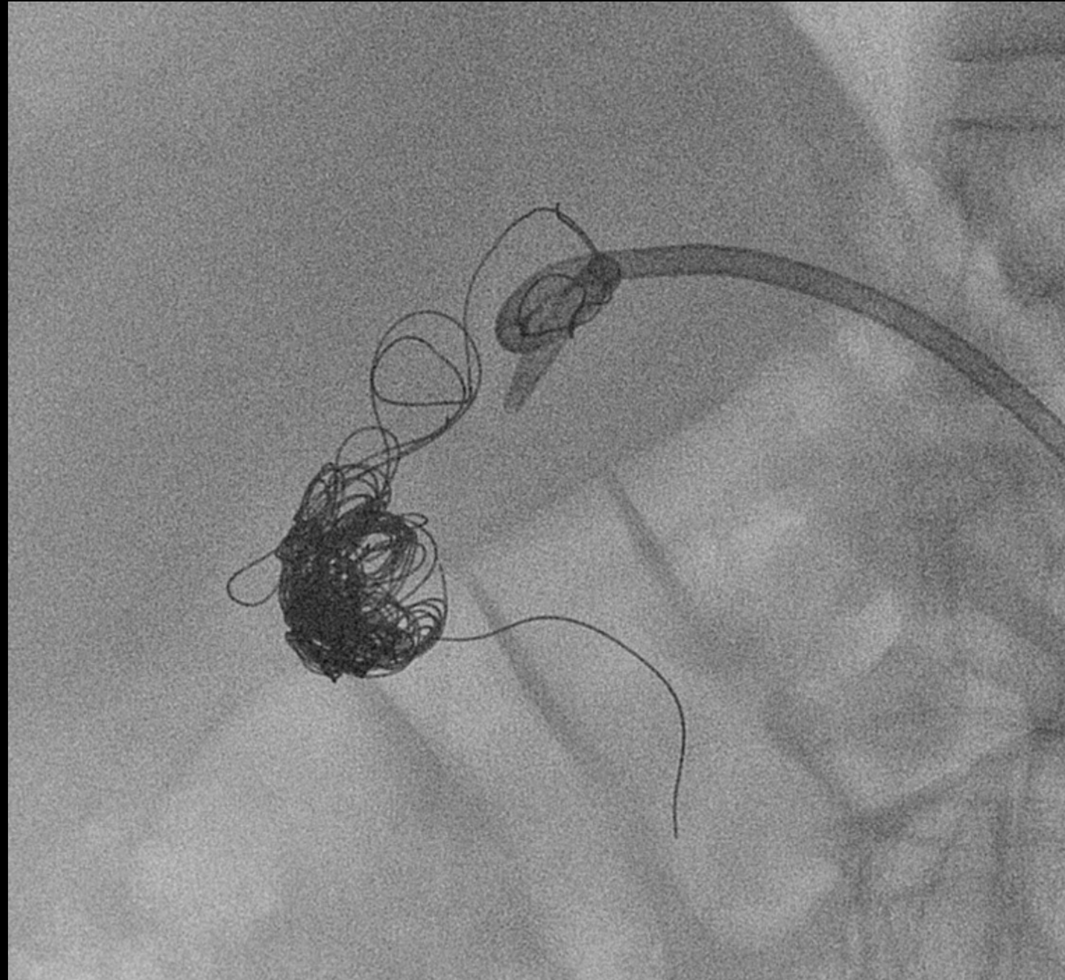
Catheter exchange 02/02/2021



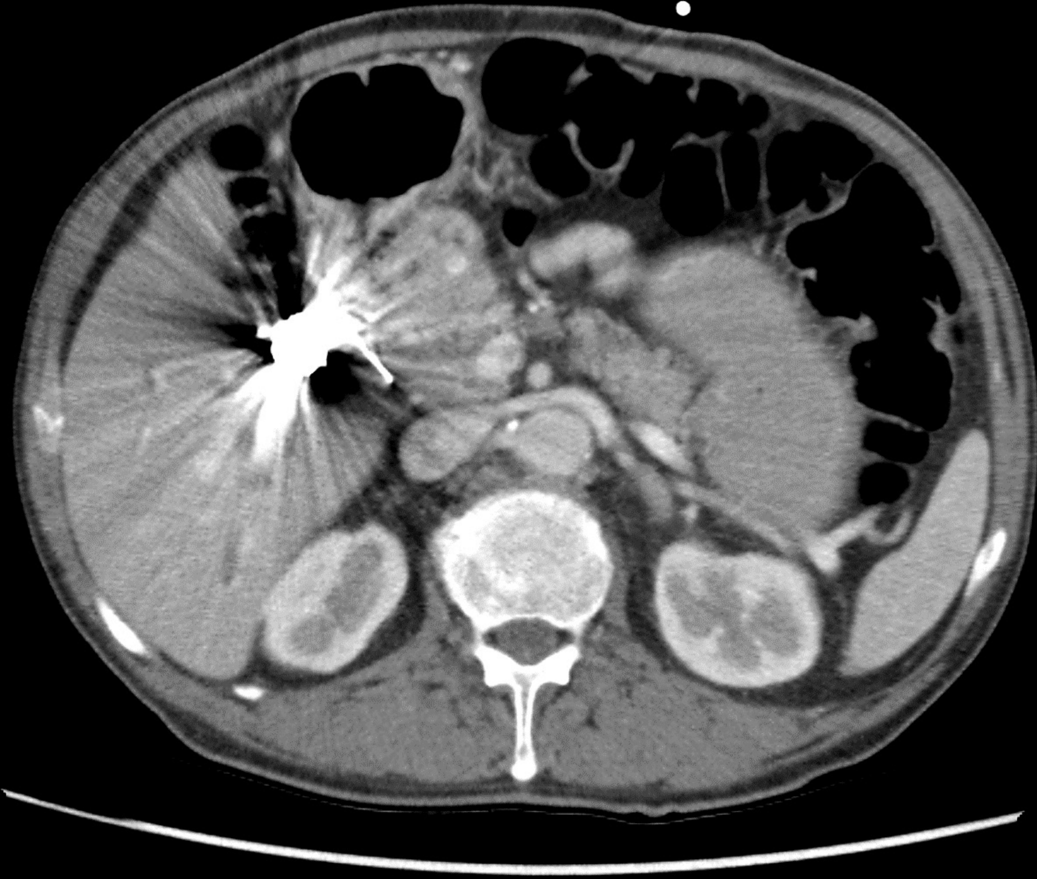
Catheter exchange 11/05/2021

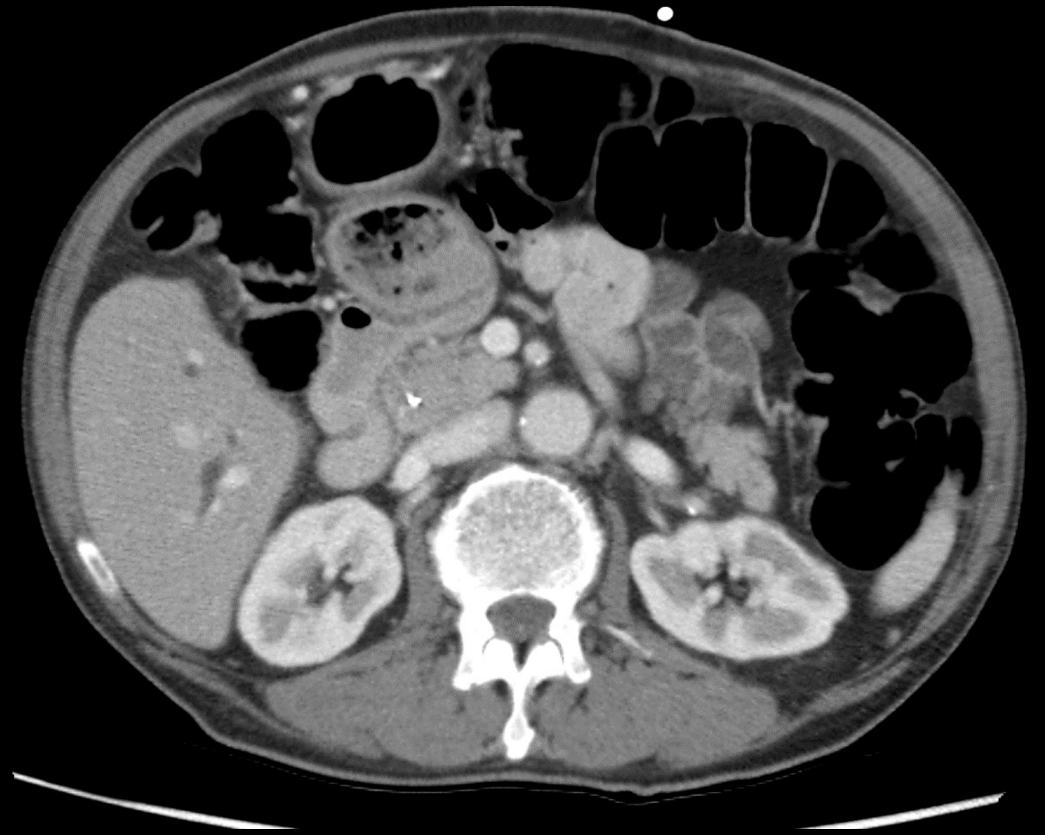


Catheter exchange 12/07/2021

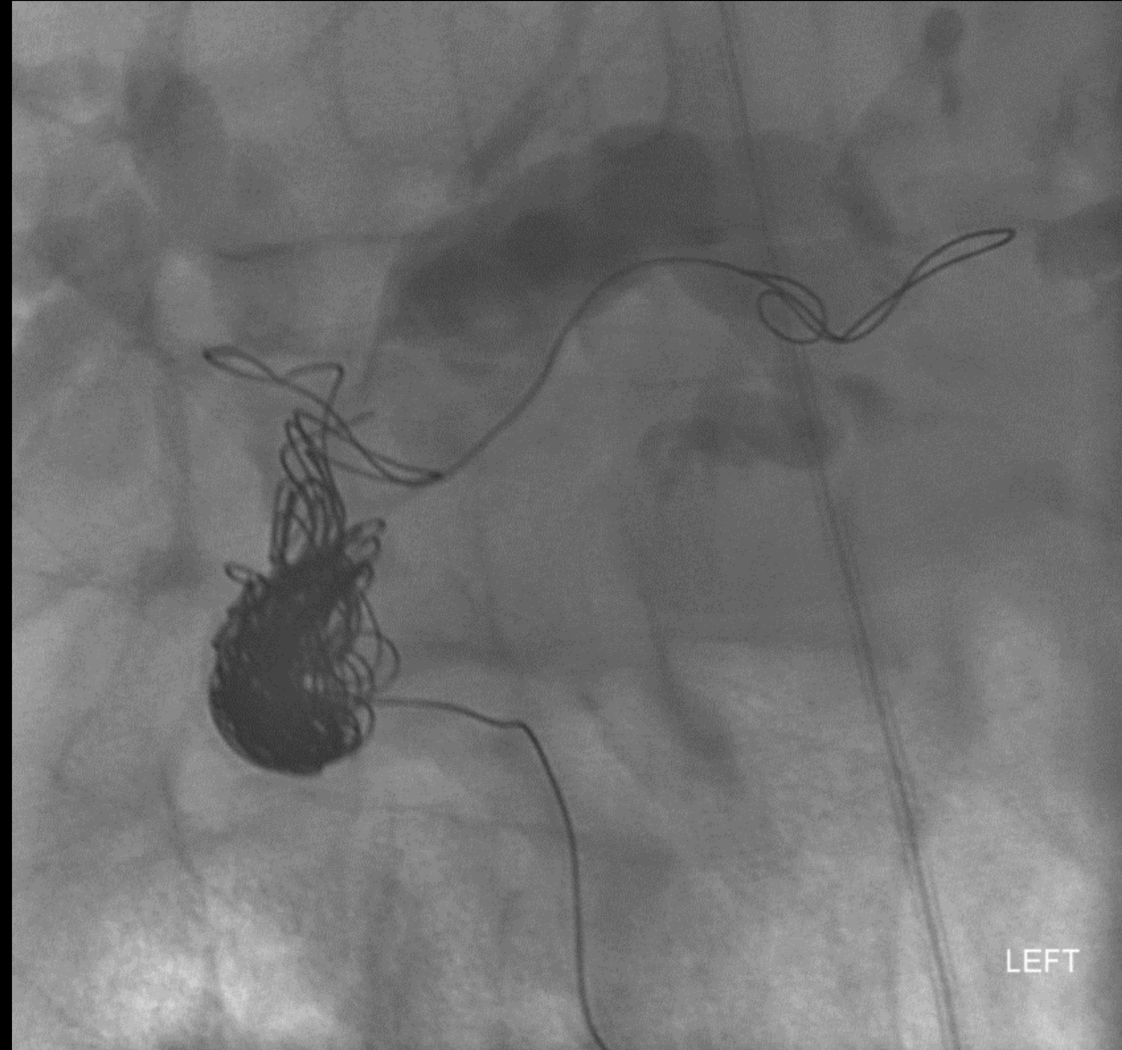


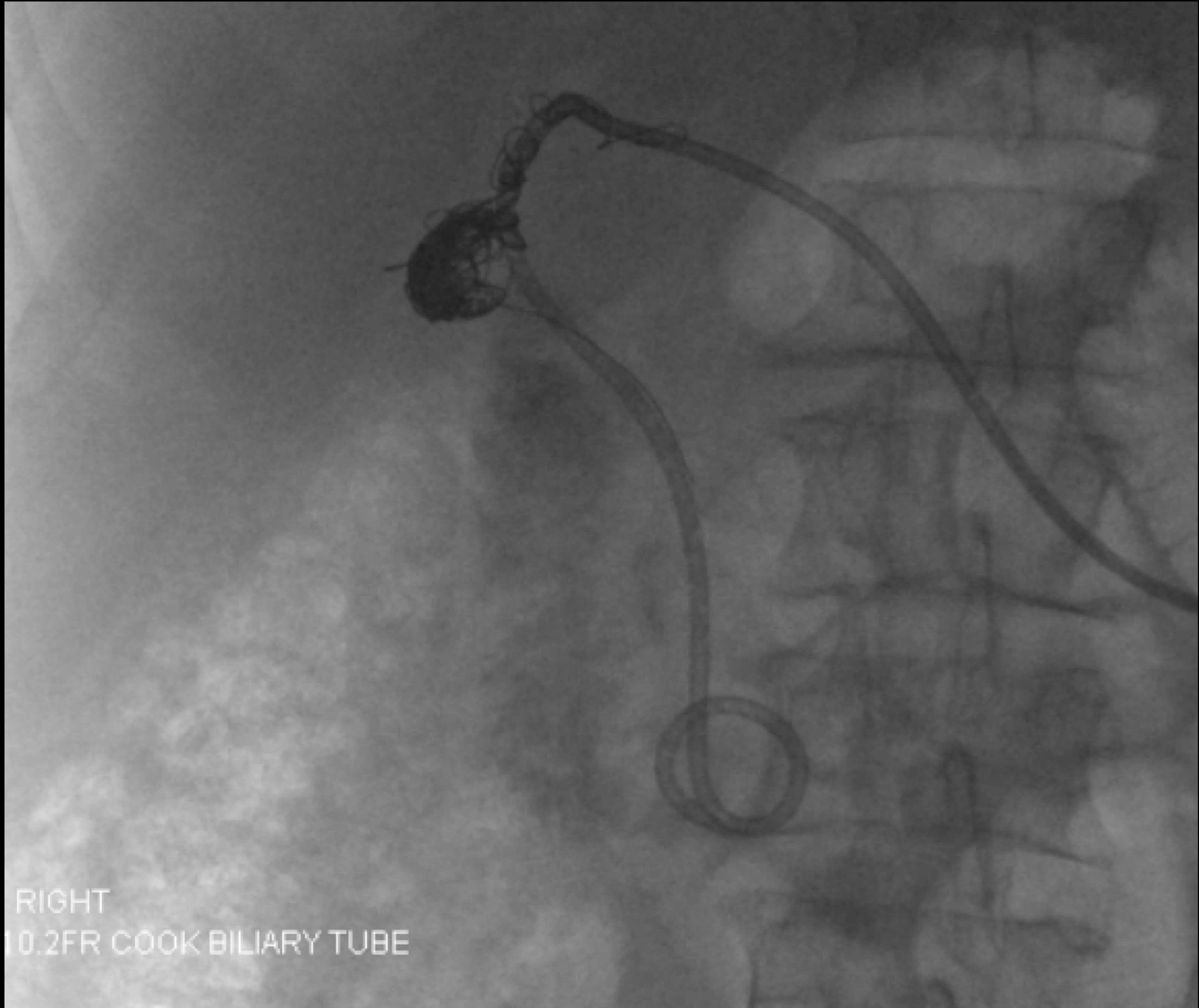
CT 10/08/2021





Catheter exchange 01/09/2021




RIGHT
10.2FR COOK BILIARY TUBE

RCS
ADVANCING SURGICAL STANDARDS

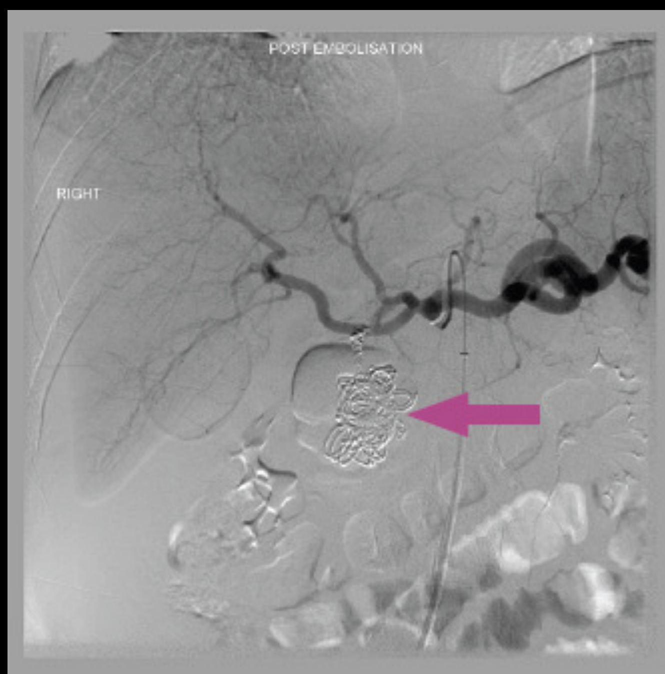
ONLINE CASE REPORT

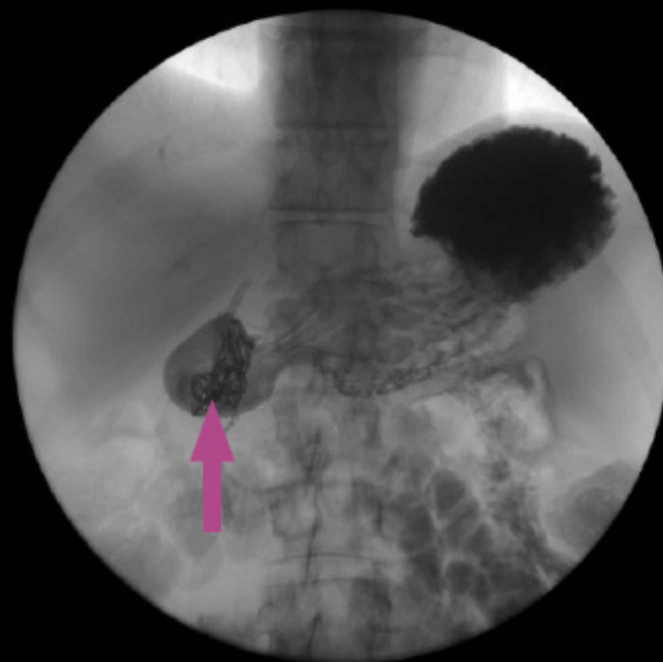
Ann R Coll Surg Engl 2011; **93:** e19–e23
doi 10.1308/003588411X13008844298652

Coil migration – a rare complication of endovascular exclusion of visceral artery pseudoaneurysms and aneurysms

JRA Skipworth[1], C Morkane[1], DA Raptis[1], L Kennedy[1], K Johal[1], D Pendse[2], DJ Brennand[2], S Olde Damink[1], M Malago[1], A Shankar[1], C Imber[1]

[1]Department of Hepatopancreaticobiliary Surgery and [2]Department of Interventional and Vascular Radiology, University College London Hospital, London, UK





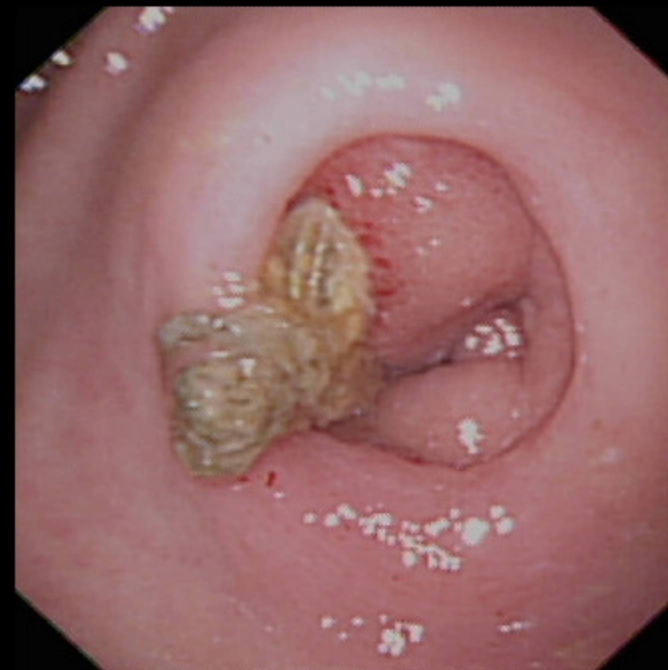


TABLE 1 A summary of reports documenting the migration of endovascular coils from visceral arteries

Author	Age (yrs)	Sex	Diagnosis	PMH	Site of vascular abnormality	Site of coil migration	Time from coil insertion	Management	Outcome
Pseudoaneurysm									
Skipworth *et al* (2009)	55	M	CP	Liver disease	Gastroduodenal artery	Gastric pylorus	10 months	NJ-nutrition and future surgery	Well
Reed *et al* (2007) [20]	50	F	PCNL	Renal calculus	Renal artery branch AV fistula	Left uretero-vesical junction	1 year	None – coil passed	Well
Shah *et al* (2007) [16]	65	F	CP	AP; DM	Splenic artery	Passage per rectum	3 weeks	None-coil passed	Well
Turaga *et al* (2006) [17]	65	M	Cholecystec-tomy	Chole	Hepatic artery	CBD	1 year	Open CBD exploration	Well
Ozkan *et al* (2002) [18]	58	M	CP	Chole	Hepatic artery	CBD	2 years	Open CBD exploration	Well
Takahashi *et al* (2001) [15]	59	M	CP	AP	Splenic artery	Gastric body	3 weeks	Open surgery (concurrent gastric carci-noma)	Well
Aneurysm									
Dinter *et al* (2007) [19]	82	F	Upper GI Bleed	Scl; GU	Coeliac trunk	Cardia/ lesser gas-tric curve	10 years	None	Fatal haemate-mesis (aorto-gastric fistula)
Abad *et al* (1990) [21]	18	M	Unknown Aetiology	Unknown	Pulmonary artery	Right basal bronchus of inferior lobe	6 weeks	Open surgery (right inferior lobectomy)	Well

CBD – Common bile duct; GU – Gastric ulcer; CP – Chronic pancreatitis; DM – Diabetes
Scl – Scleroderma; AP– Acute pancreatitis; PCNL – Percutaneous nephro-lithotomy; NJ- Nasojejunal
GI – Gastrointestinal; Chole – Acute cholecystitis

Case Reports in Gastroenterology

Case Rep Gastroenterol 2013;7:487–491

DOI: 10.1159/000357151
Published online: November 19, 2013

© 2013 S. Karger AG, Basel
1662–0631/13/0073–0487$38.00/0
www.karger.com/crg

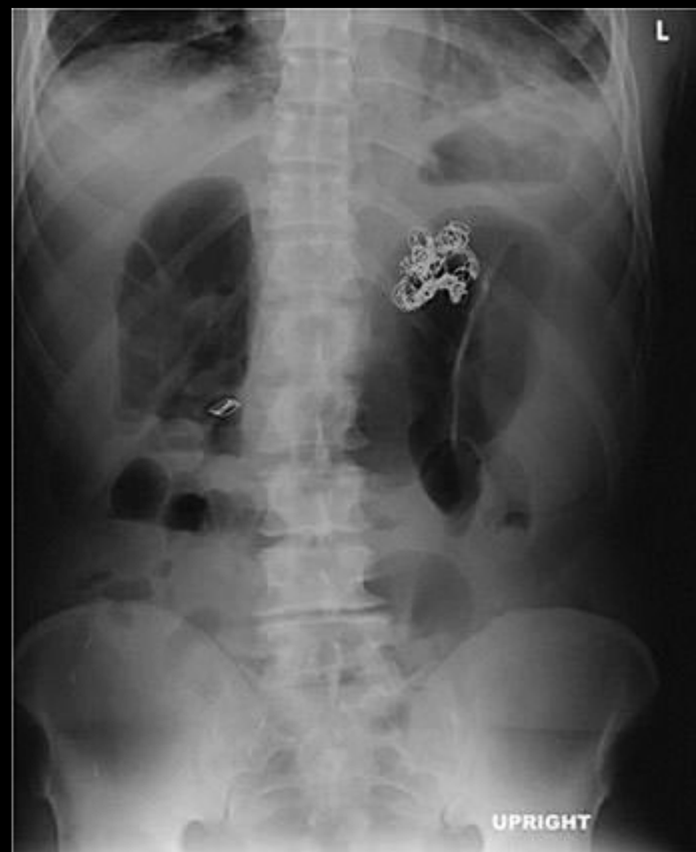
Karger Open access

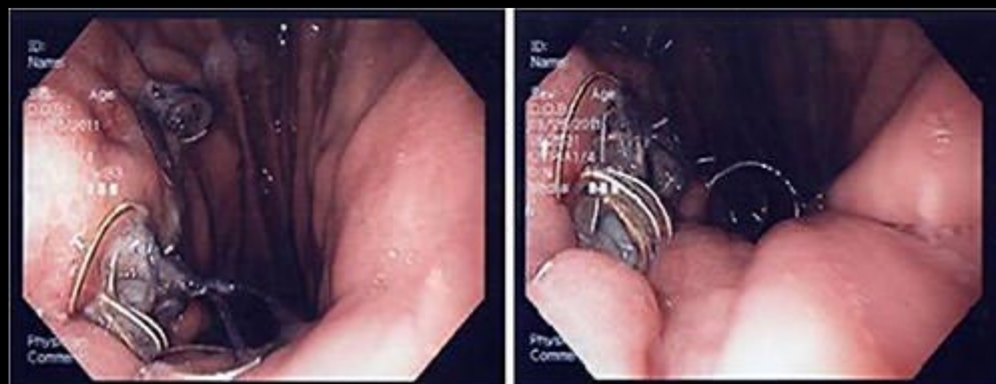
This is an Open Access article licensed under the terms of the Creative Commons Attribution-NonCommercial 3.0 Unported license (CC BY-NC) (www.karger.com/OA-license), applicable to the online version of the article only. Distribution permitted for non-commercial purposes only.

Coil Migration after Transarterial Coil Embolization of a Splenic Artery Pseudoaneurysm

Bezawit D. Tekola David M. Arner Brian W. Behm

Division of Gastroenterology and Hepatology, Department of Medicine, University of Virginia, Charlottesville, Va., USA





Case Report

Inadvertent Migration of Hepatic Artery Pseudoaneurysm Coil during Endoscopic Retrograde Cholangiopancreatography

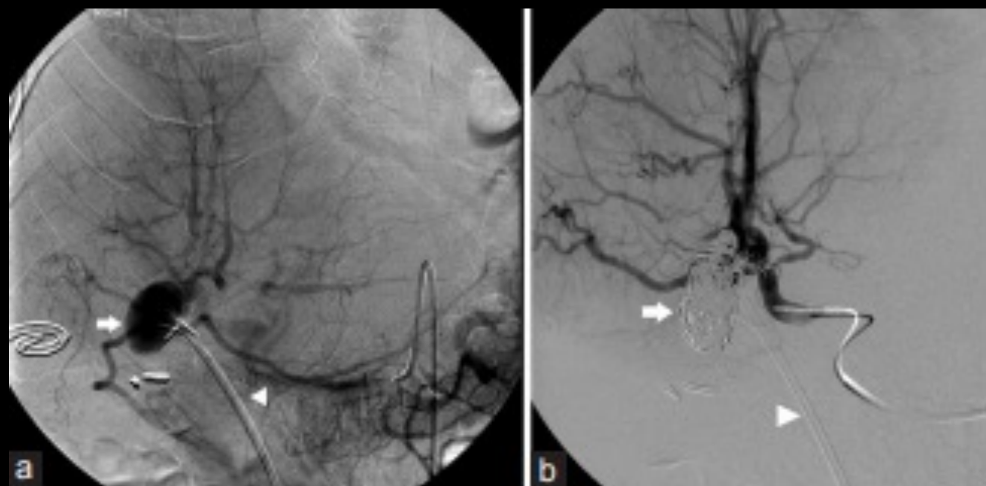
Abstract

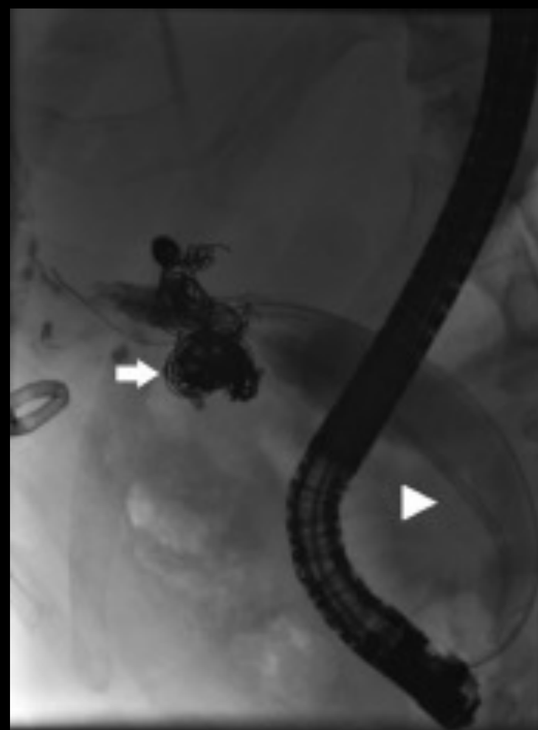
We report a case of a 72-year-old male with a cascade of complications being diagnosed as an acute cholecystitis. The cascade includes iatrogenic pulling of coils, which were placed for treatment of right hepatic artery pseudoaneurysm, into the common bile duct (CBD) in an attempt for removal of the misplaced/migrated CBD plastic stent inserted by endoscopic retrograde cholangiopancreatography (ERCP). The case demonstrates a series of mishaps leading to a rare complication of iatrogenic migration of transarterial coil in the gastrointestinal tract. This could be the first case of coil migration as a complication of ERCP due to suboptimal stenting/removal techniques.

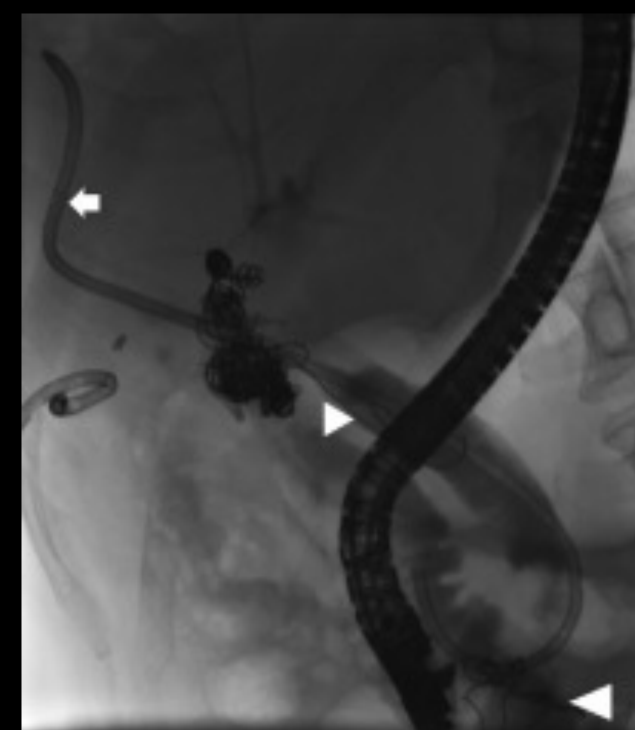
Keywords: *Bleeding, coil migration, embolization, visceral pseudoaneurysm*

Riad Alchanan[1,2], Rajdeep Chhina[1], Ghali Salahia[1], Dean Huang[1], Dylan lewis[1]

[1]Department of Radiology, King's College Hospital, [2]Department of Interventional Radiology, The Royal London Hospital, London, United Kingdom







Published online: 2021-04-10

Case Report

Inadvertent Migration of Hepatic Artery Pseudoaneurysm Coil during Endoscopic Retrograde Cholangiopancreatography

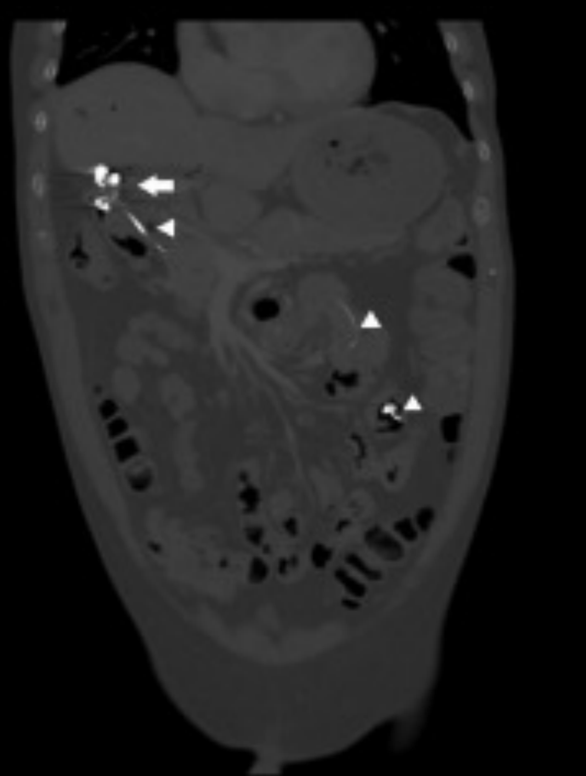
Abstract

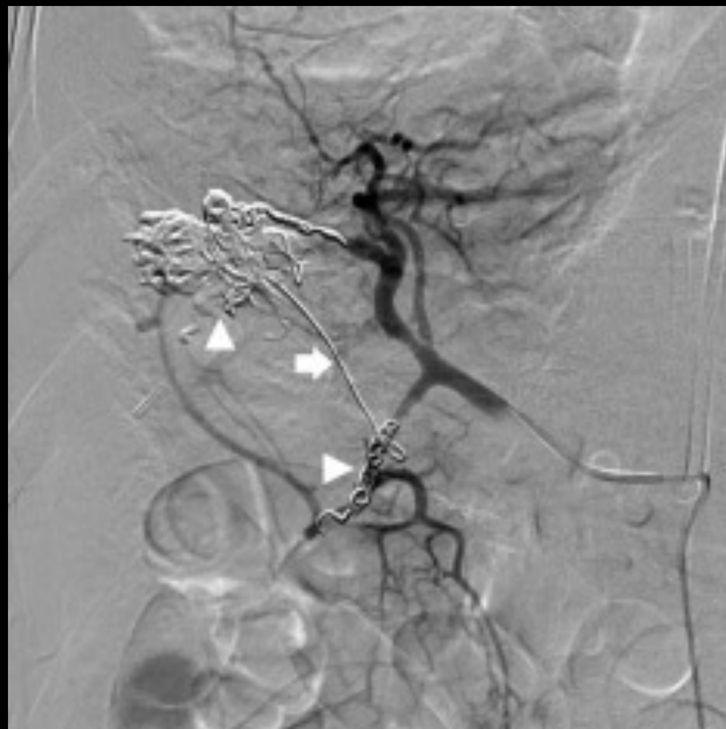
We report a case of a 72-year-old male with a cascade of complications being diagnosed as an acute cholecystitis. The cascade includes iatrogenic pulling of coils, which were placed for treatment of right hepatic artery pseudoaneurysm, into the common bile duct (CBD) in an attempt for removal of the misplaced/migrated CBD plastic stent inserted by endoscopic retrograde cholangiopancreatography (ERCP). The case demonstrates a series of mishaps leading to a rare complication of iatrogenic migration of transarterial coil in the gastrointestinal tract. This could be the first case of coil migration as a complication of ERCP due to suboptimal stenting/removal techniques.

Keywords: *Bleeding, coil migration, embolization, visceral pseudoaneurysm*

Riad Alchanan[1,2], Rajdeep Chhina[1], Ghali Salahia[1], Dean Huang[1], Dylan lewis[1]

[1]Department of Radiology, King's College Hospital,
[2]Department of Interventional Radiology, The Royal London Hospital, London, United Kingdom





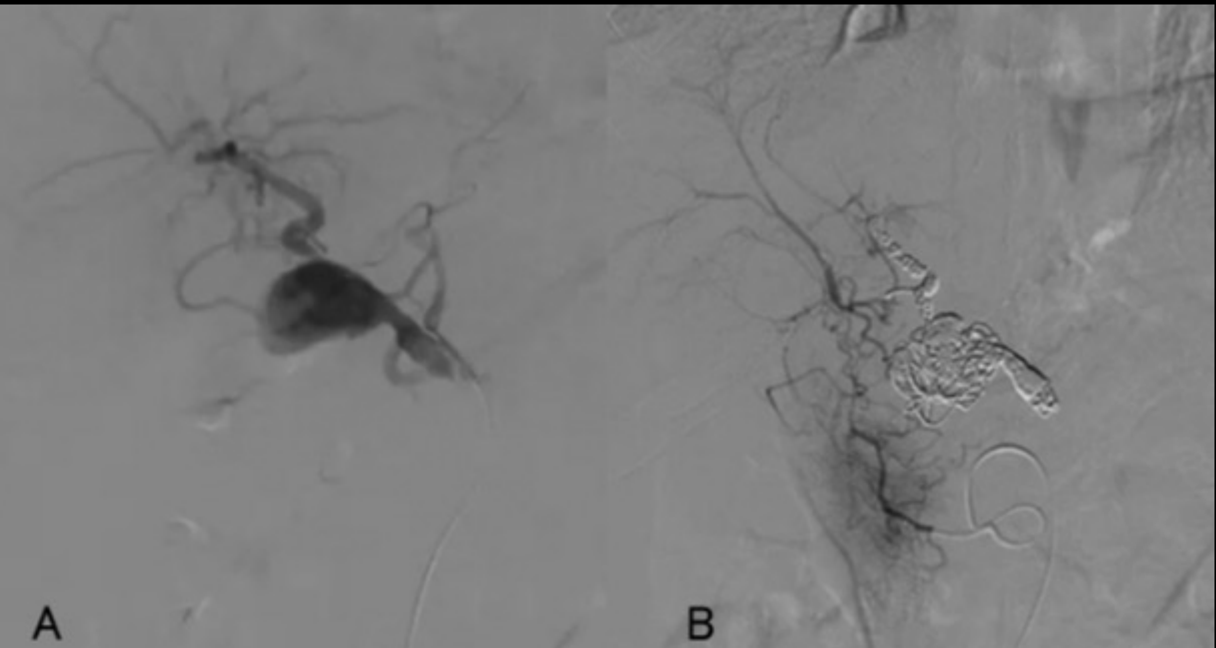
EJVES Short Reports (2018) 39, 33—36

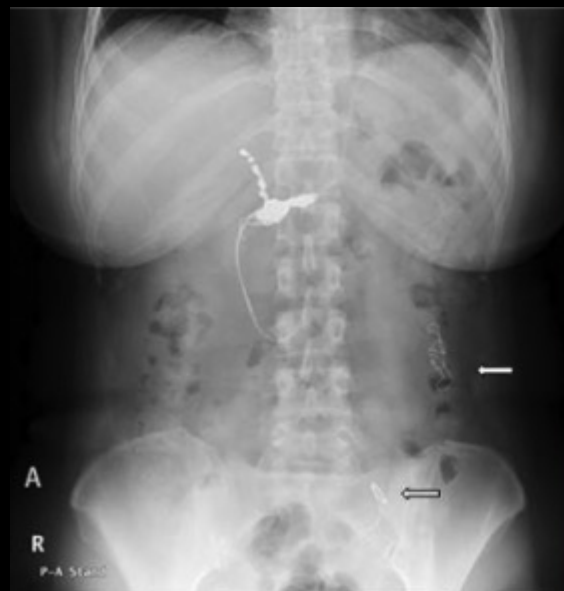
CASE REPORT

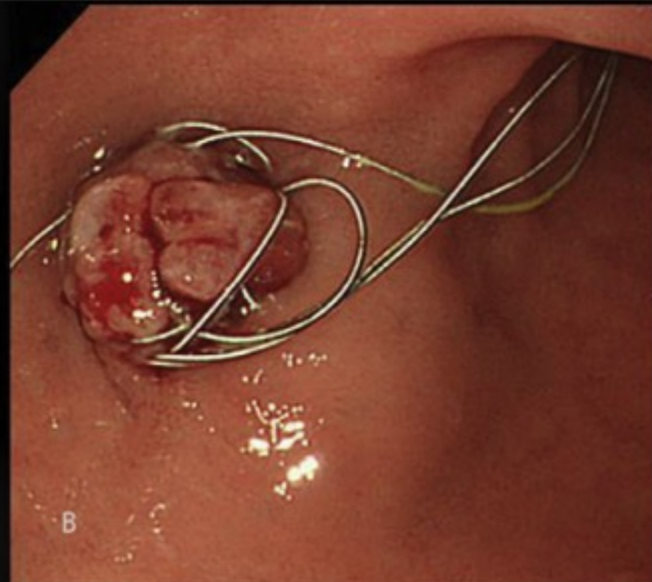
Coil Migration to the Duodenum 1 Year Following Embolisation of a Ruptured Giant Common Hepatic Artery Aneurysm

Yoshikatsu Nomura [a,*], Yasuko Gotake [a], Takuya Okada [b], Masato Yamaguchi [b], Koji Sugimoto [b], Yutaka Okita [a]

[a] Division of Cardiovascular Surgery, Department of Surgery, Kobe University Graduate School of Medicine, Kobe, Japan
[b] Department of Radiology, Kobe University Graduate School of Medicine, Kobe, Japan







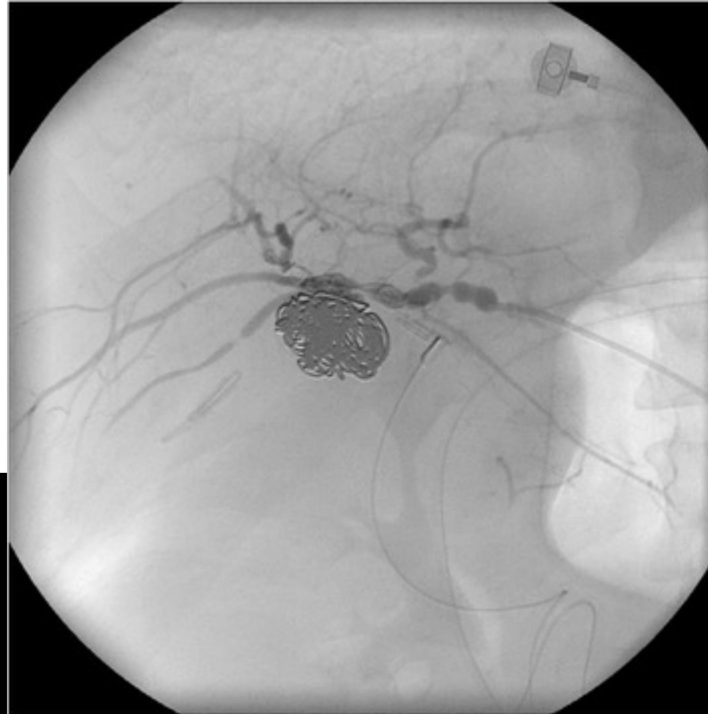
Raashed et al. BMC Surgery (2015) 15:51
DOI 10.1186/s12893-015-0039-8

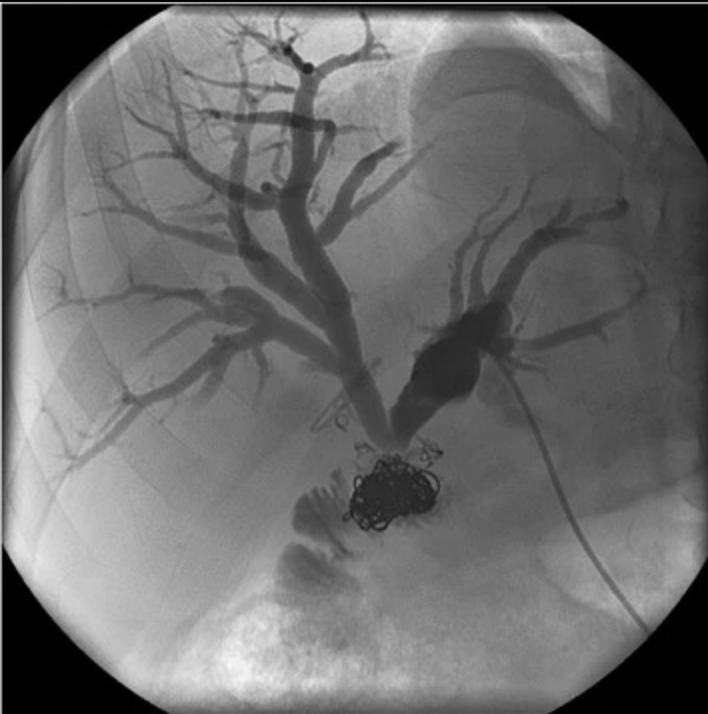
BMC Surgery

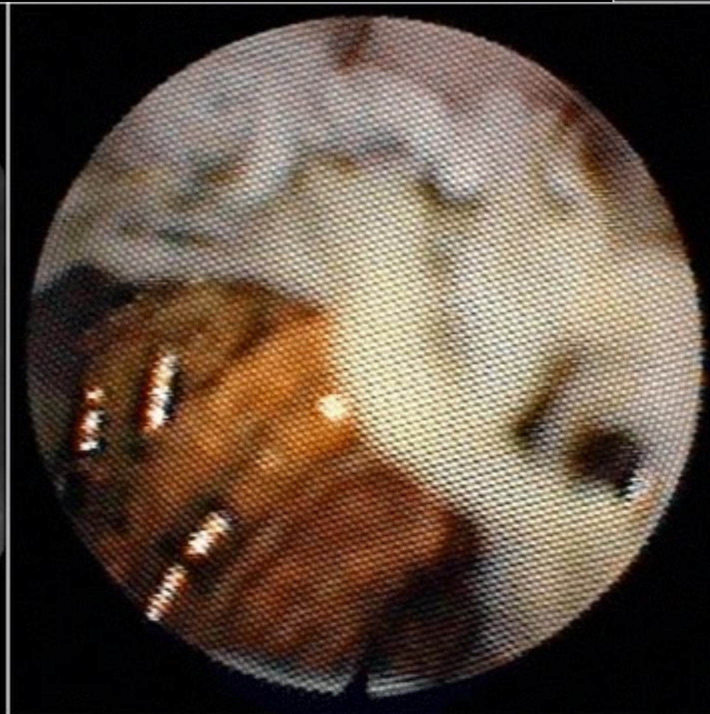
CASE REPORT **Open Access**

Vascular coil erosion into hepaticojejunostomy following hepatic arterial embolisation

Soondoos Raashed[1], Manju D Chandrasegaram[1,2], Khaled Alsaleh[1], Glen Schlaphoff[3] and Neil D Merrett[1,2*]







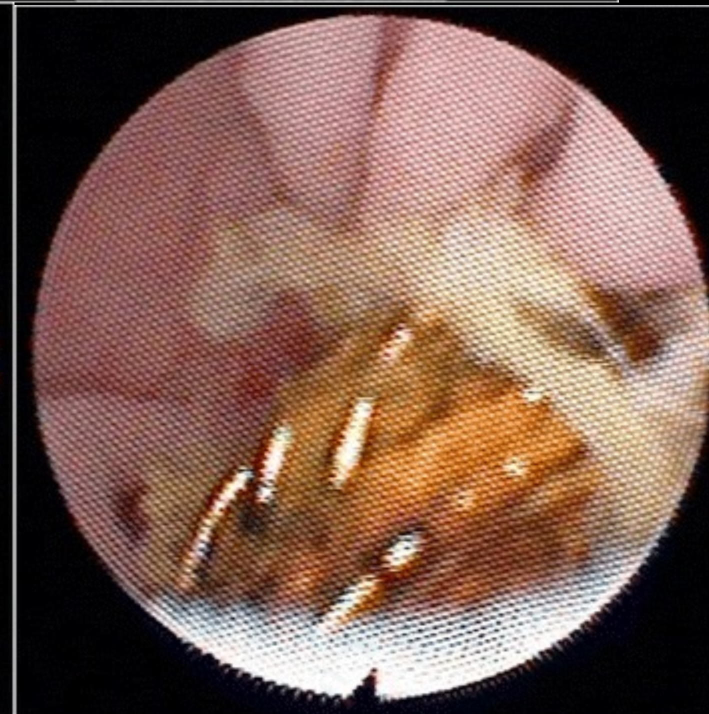
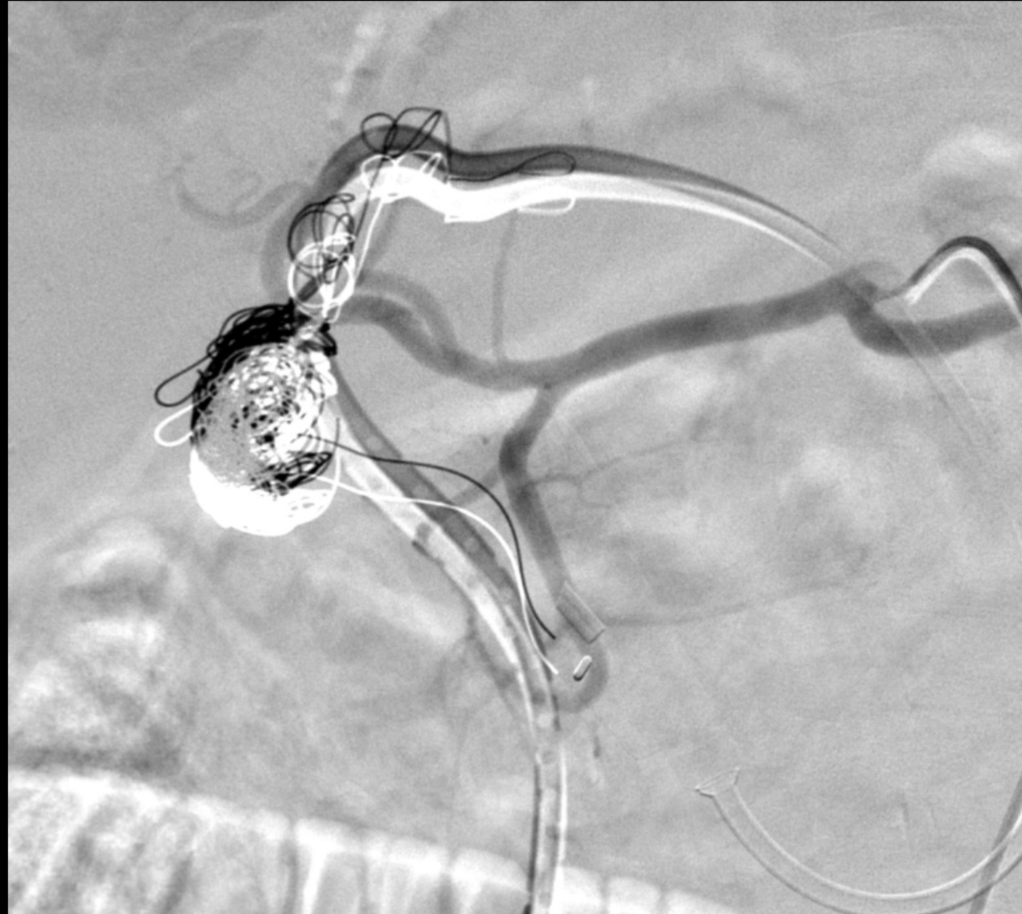


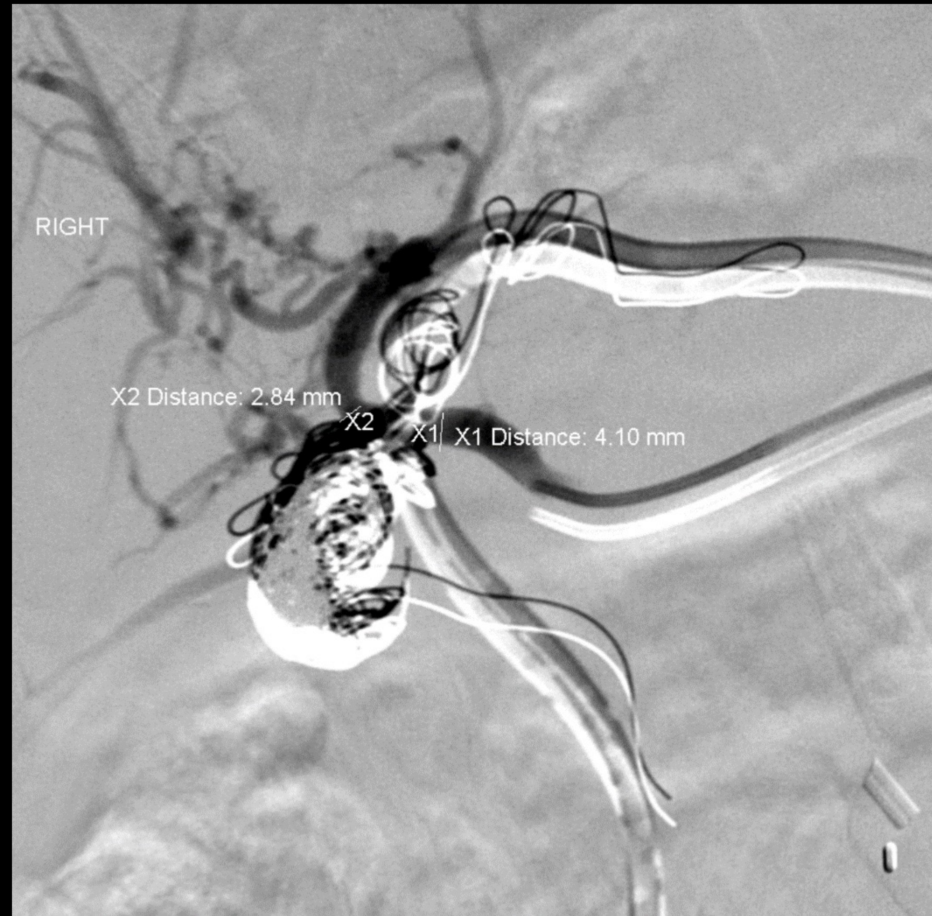
Table 1 Vascular coil migration from right hepatic artery to common bile duct

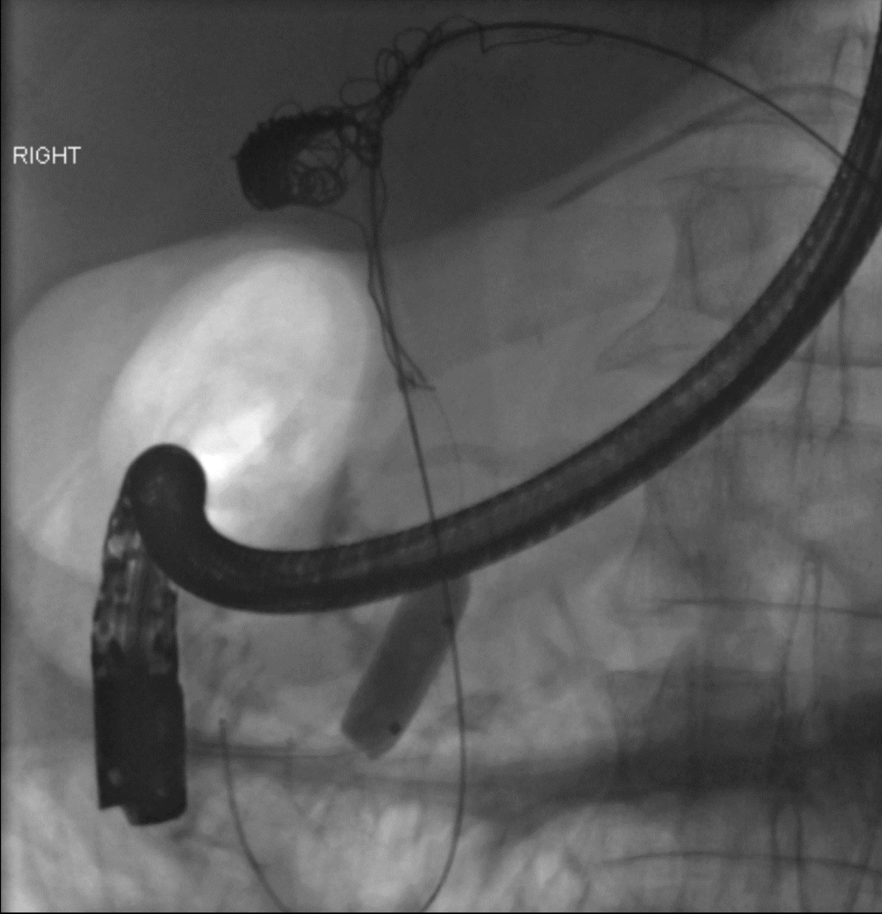
Author	Age/ sex	Primary operation	Timing of RHApA bleed post-primary operation	Management of bleed	Time after which vascular coils migrated to CBD	Presenting symptom	Management
Current study	38 M	Bile Duct Reconstruction after BDI following cholecystectomy	1 week	Required one attempt at coil embolisation "packing technique" with flow maintained within the artery.	10 months	Obstructive jaundice and Cholangitis	3 attempts with PTC to traverse biliary obstruction failed, bilateral biliary catheter drainage, and re-operation to revise hepaticojejunostomy
Van Steenbergen et al. [22]	72 M	Liver transplantation for primary biliary cirrhosis	10 weeks	Coil embolisation "packing technique" with flow maintained within the artery. Bleeding recurred with revascularization of aneurysm. ePTFE covered coronary stent placed to exclude pseudoaneurysm	5 years	Stone and coils in bile duct, described as "biliary colic"	ERCP (failed removal), coils and stone removed with PTC
AlGhamdi et al. [23]	55 F	Liver transplant for Hepatitis C cirrhosis and hepatocellular carcinoma	13 weeks post-transplant, (had 2 balloon angioplasties of hepatic artery jump graft 10 weeks post-transplant for stenosis)	Embolisation of bleeding aneurysm, and balloon covered stent used to treat hepatic artery stenosis. Further small pseudoaneurysm at junction of hepatic artery and jump graft managed with coil packing and further covered stent to exclude pseudoaneurysm.	3 months	Coil migration identified at time of biliary stent replacement for biliary stricture.	Coils and stones removed at ERCP with further balloon dilatation of stricture.
Turaga et al. [27]	65 M	Difficult cholecystectomy for gangrenous GB with T-tube choledochotomy after failed CBD stone retrieval	3 weeks	Required one attempt at embolisation	1 year	Obstructive jaundice and Cholangitis	ERCP (failed removal) → required open bile duct exploration, removal of coils and insertion of T-tube. Artery and pseudoaneurysm ligated
Kao et al. [28]	65 F	Cholecystectomy and T-tube choledochostomy	Not reported	Coil embolisation	8 years	Obstructive jaundice	PTC performed for biliary drainage followed by ERCP for removal of coils and stone from CBD
Ozkan et al. [14]	58 M	Subtotal Cholecystectomy for cholecystitis	4 weeks, Required 2 attempts at embolisation	Coil embolisation, "packing technique" with flow maintained within the artery. Required further embolisation 3 days later for rebleed, and growth of neck of pseudoaneurysm	2 years	Pancreatitis	ERCP identified coils → required open bile duct exploration, removal of coils and stones, and drainage of pseudocyst with cystojejunostomy

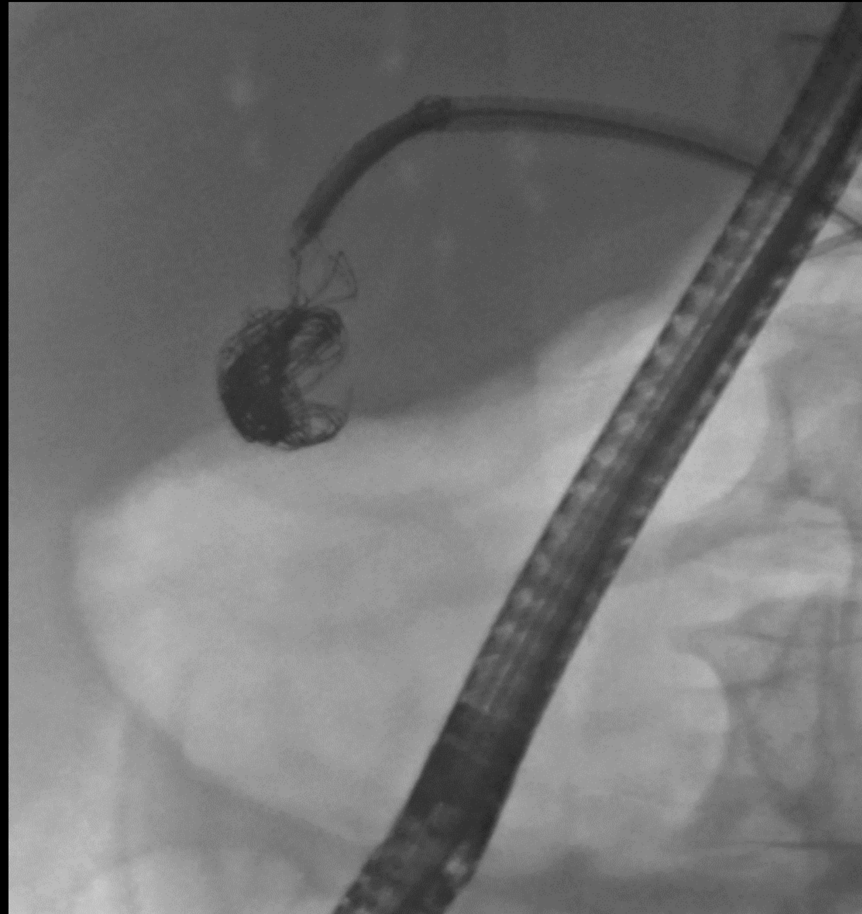
M: Male, F: Female, RHApA: RHA pseudoaneurysm, PTC: Percutaneous transhepatic cholangiography, ERCP: Endoscopic retrograde cholangiopancreatography.

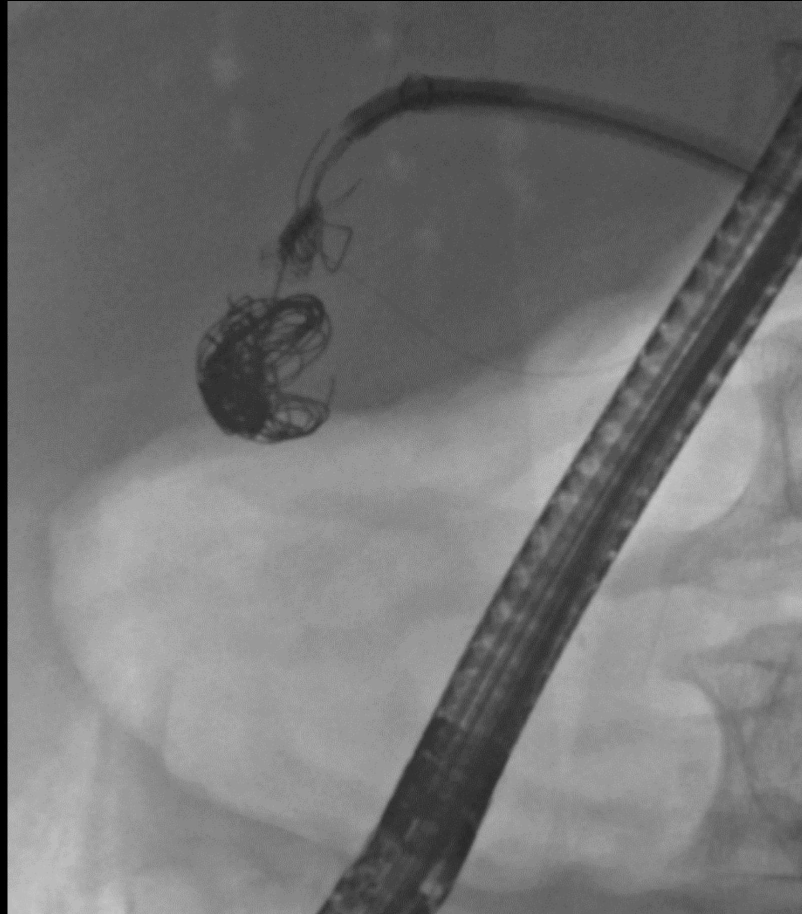
Management

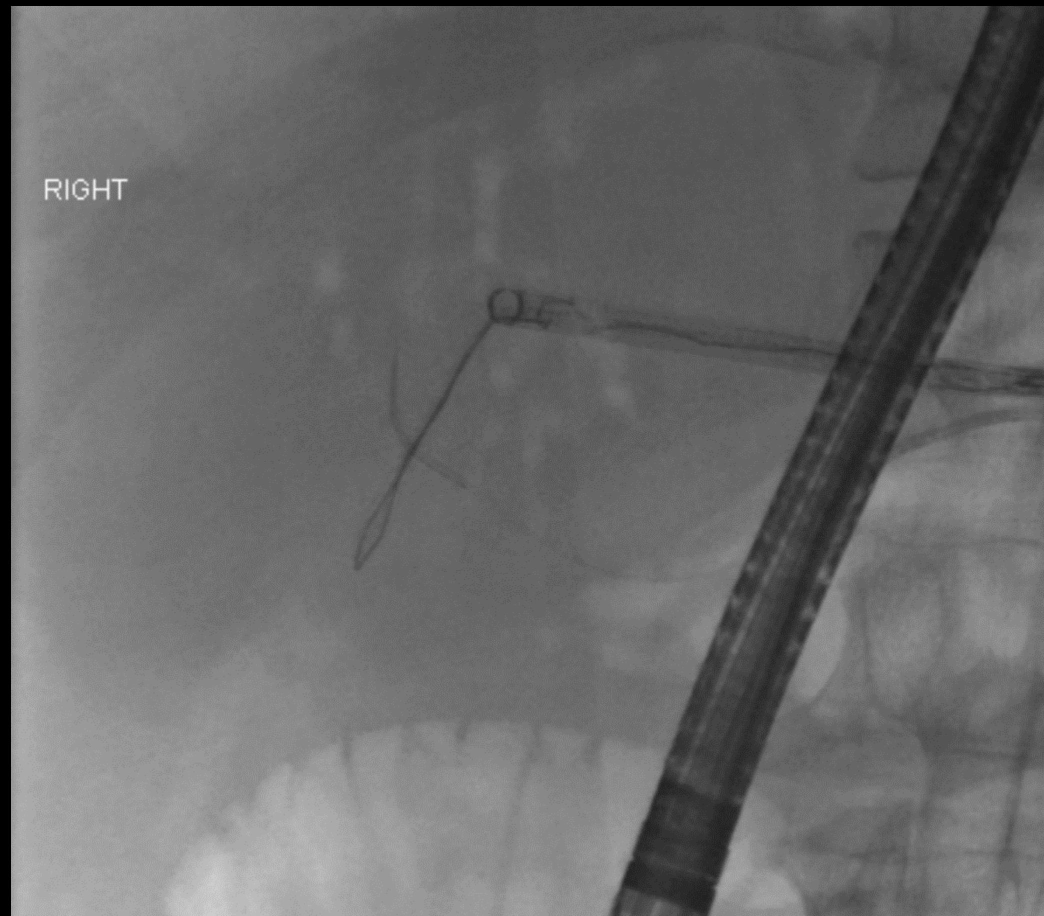


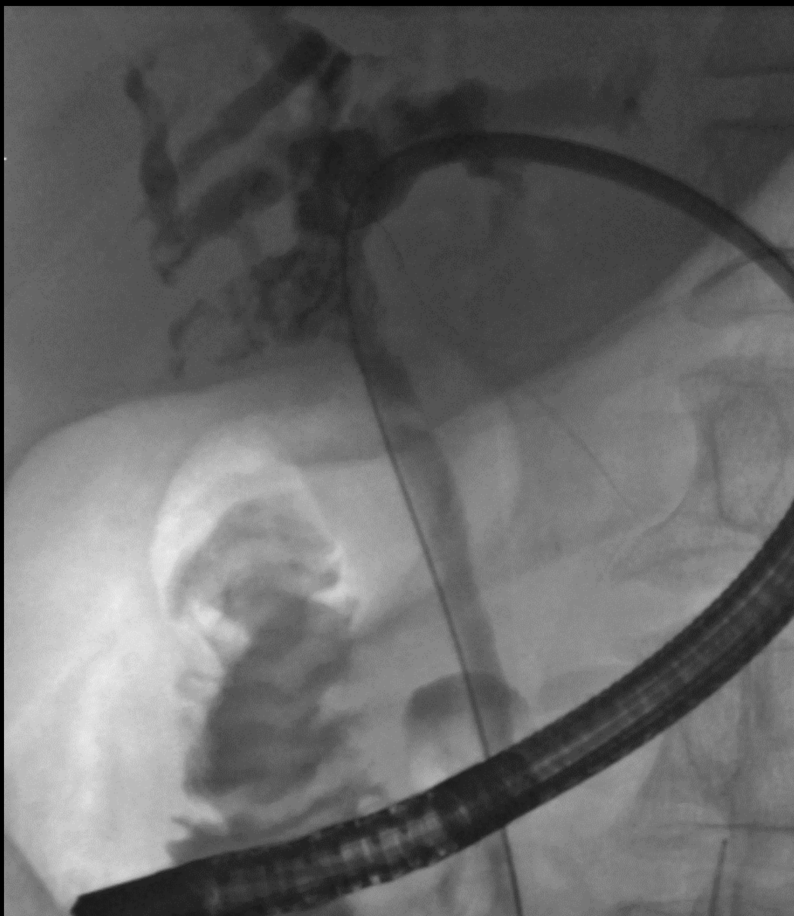

RIGHT
X2 Distance: 2.84 mm
X2
X1
X1 Distance: 4.10 mm

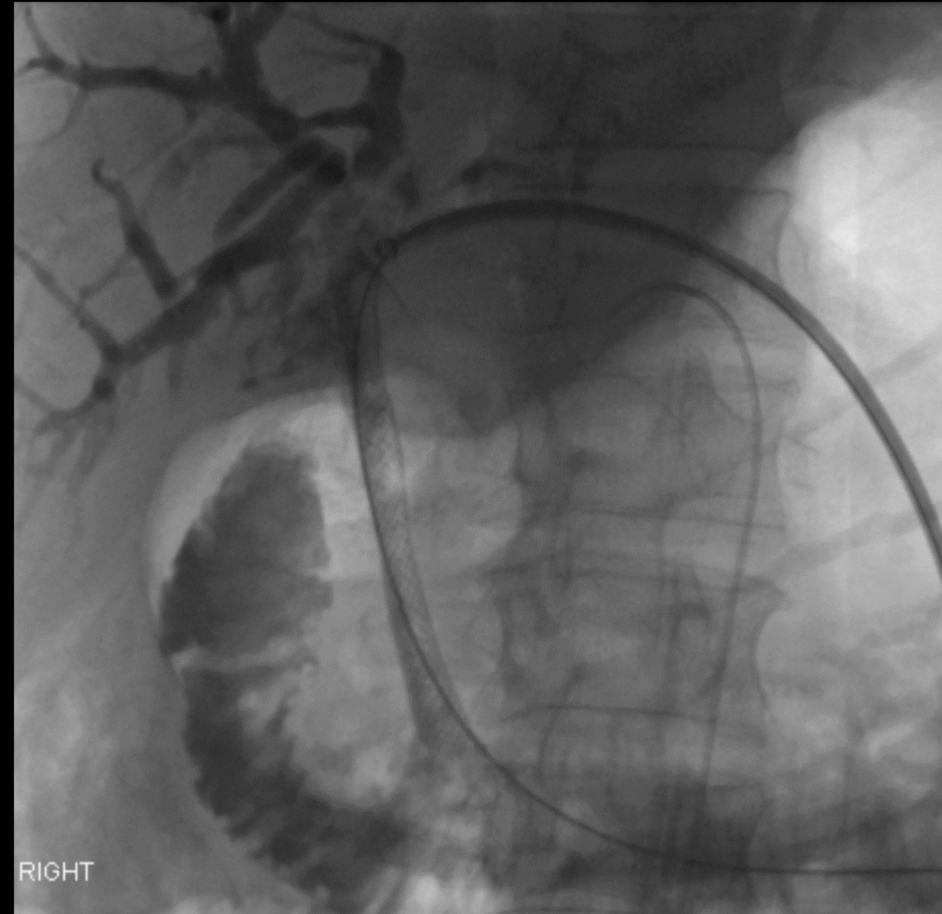

RIGHT






RIGHT




RIGHT