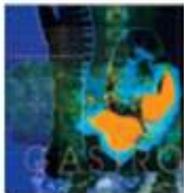


Deceived by your own eyes

מכון גסטרו
בי"ח איכילוב

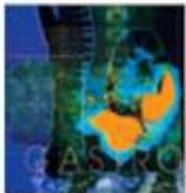


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Clinical presentation

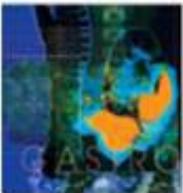
- A 53 year old male
- Evaluated for:
 - Right upper quadrant pain for 3 months
 - 16 Kg weight loss for the past several months



Lab Exam

- Bili 3.5\1.7
- ALT 134
- AST 88
- ALKP 600
- GGT 521
- Cr 0.9
- Albumin 38

- AFP 2
- WBC 9.4
- HB 12.2
- PLTS 191000
- INR 1.1



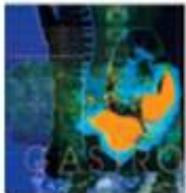
Lab Exam

- ANA negative
- ASMA negative
- AMA negative

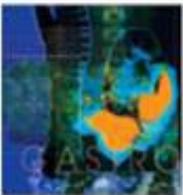
- HBV negative
- HCV negative

- Tran Sat 32%
- Ferritin 380

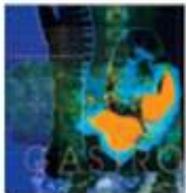
- Ceruloplasmin 30



US

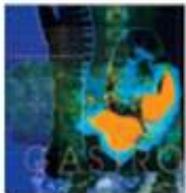


US

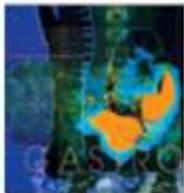
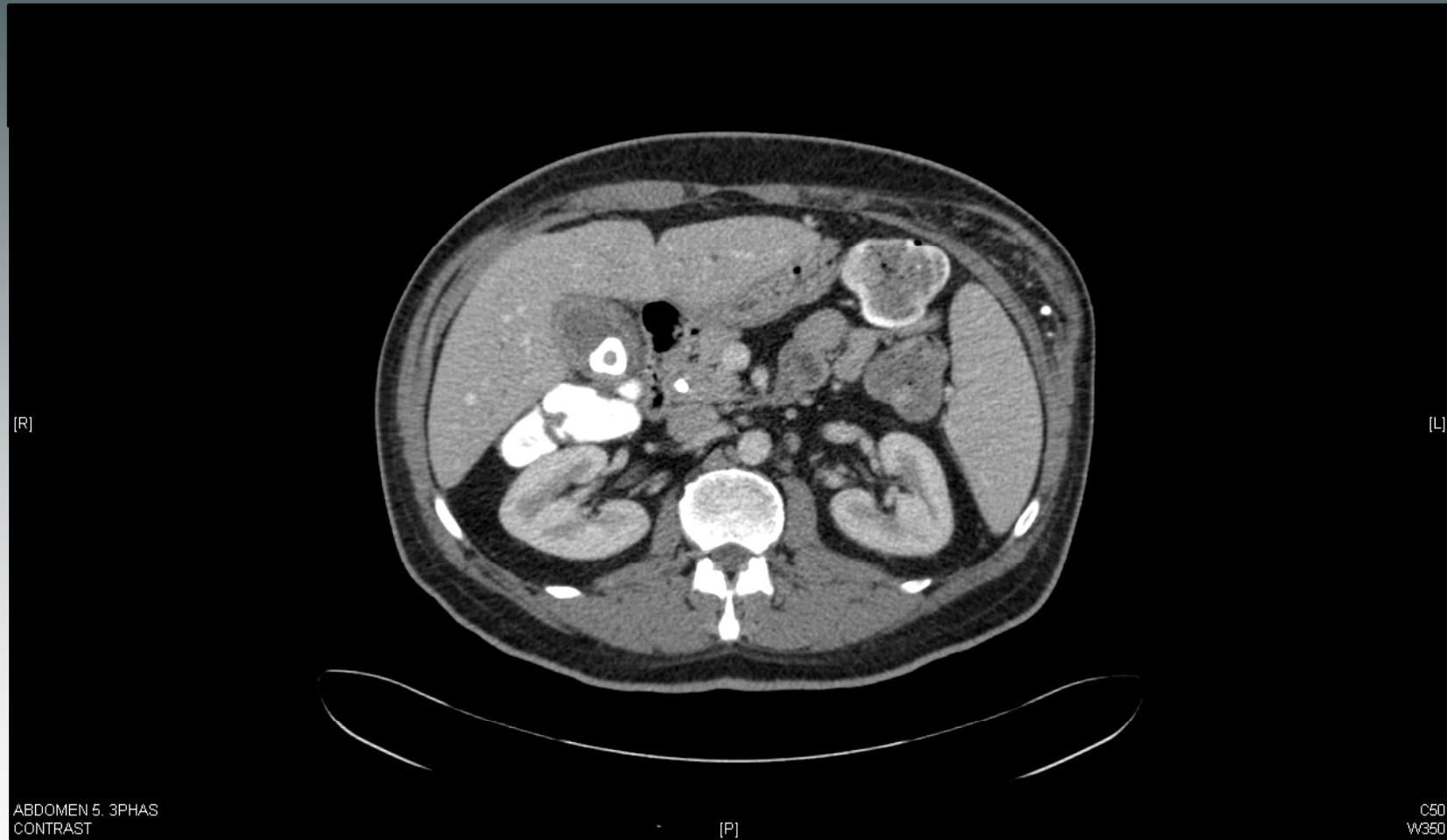


US

- Gallbladder – wall thickened – 6 mm with stones and sludge
- Intrahepatic bile duct dilatation
- Thickened RHD wall & CHD
- Appearance Suggestive of PSC

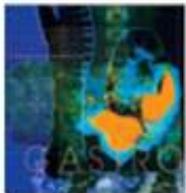


CT

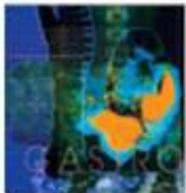
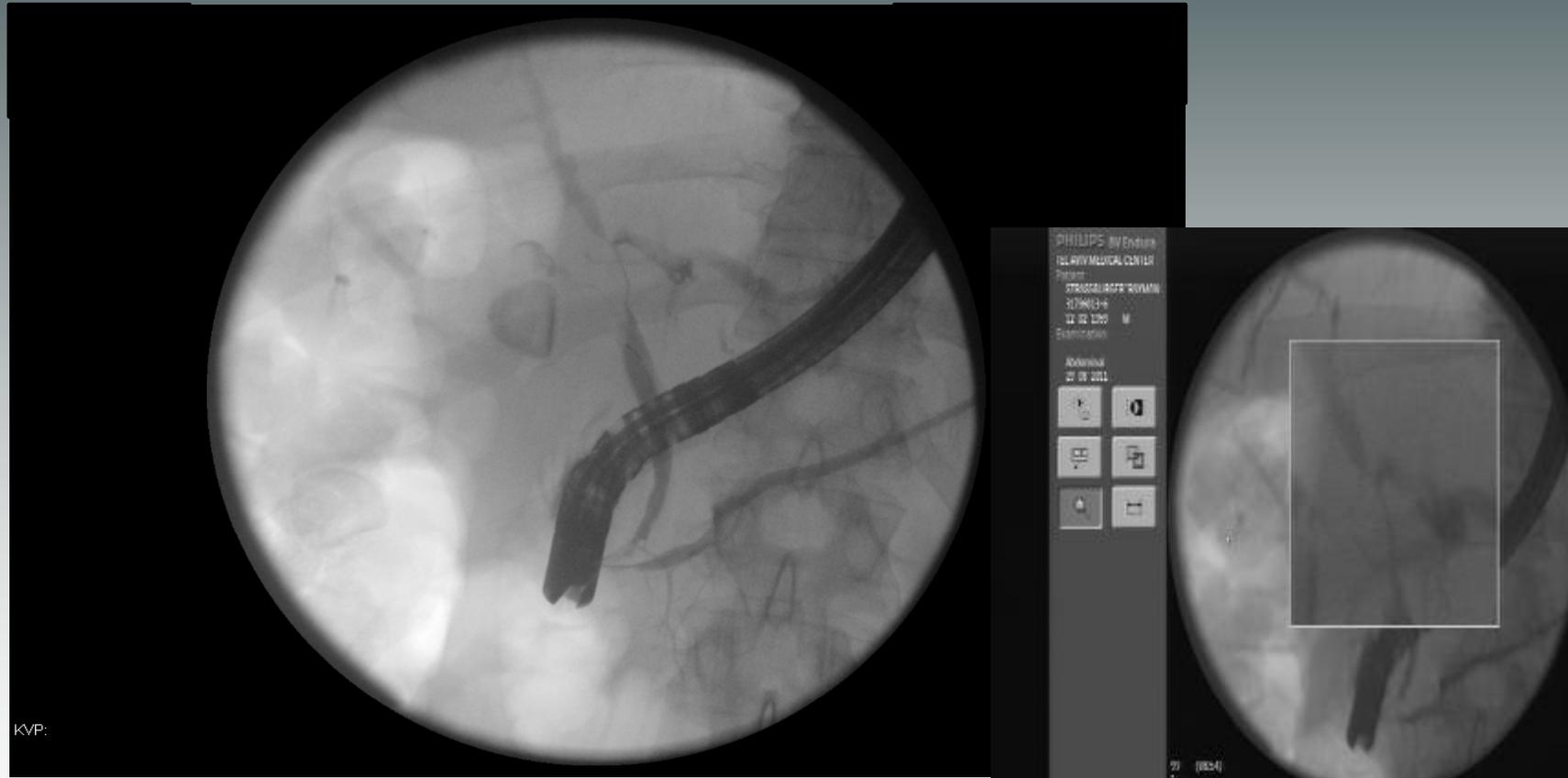


CT

- Diffuse gallbladder wall thickening and gallstones
- Suspected for hilar obstruction secondary to gallbladder cancer

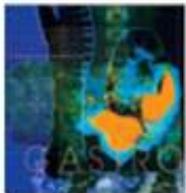


ERCP



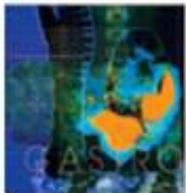
ERCP

- Extrahepatic bile duct smooth stricture beginning in the common hepatic duct and extending up to the bifurcation and into the right biliary tree
- Delay of drainage of contrast from both sides of the liver
- Non filling of the cystic duct
- Radiopaque gallstones present



ERCP

- Wire guided brush cytology & FISH was taken from CHD into the RHD
- Balloon dilation and stenting to the right and left systems



Cytology FNA / Lab results

ERCP brushing

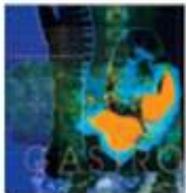
Atypical granular cells
Favor degenerative
etiology

FISH

negative for :
chromosome 3,7,17 and
9p21

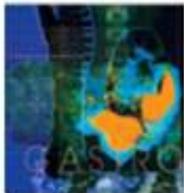
CA 19-9 - 4.4

CEA – 1.3

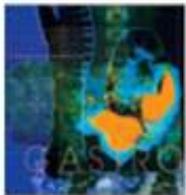
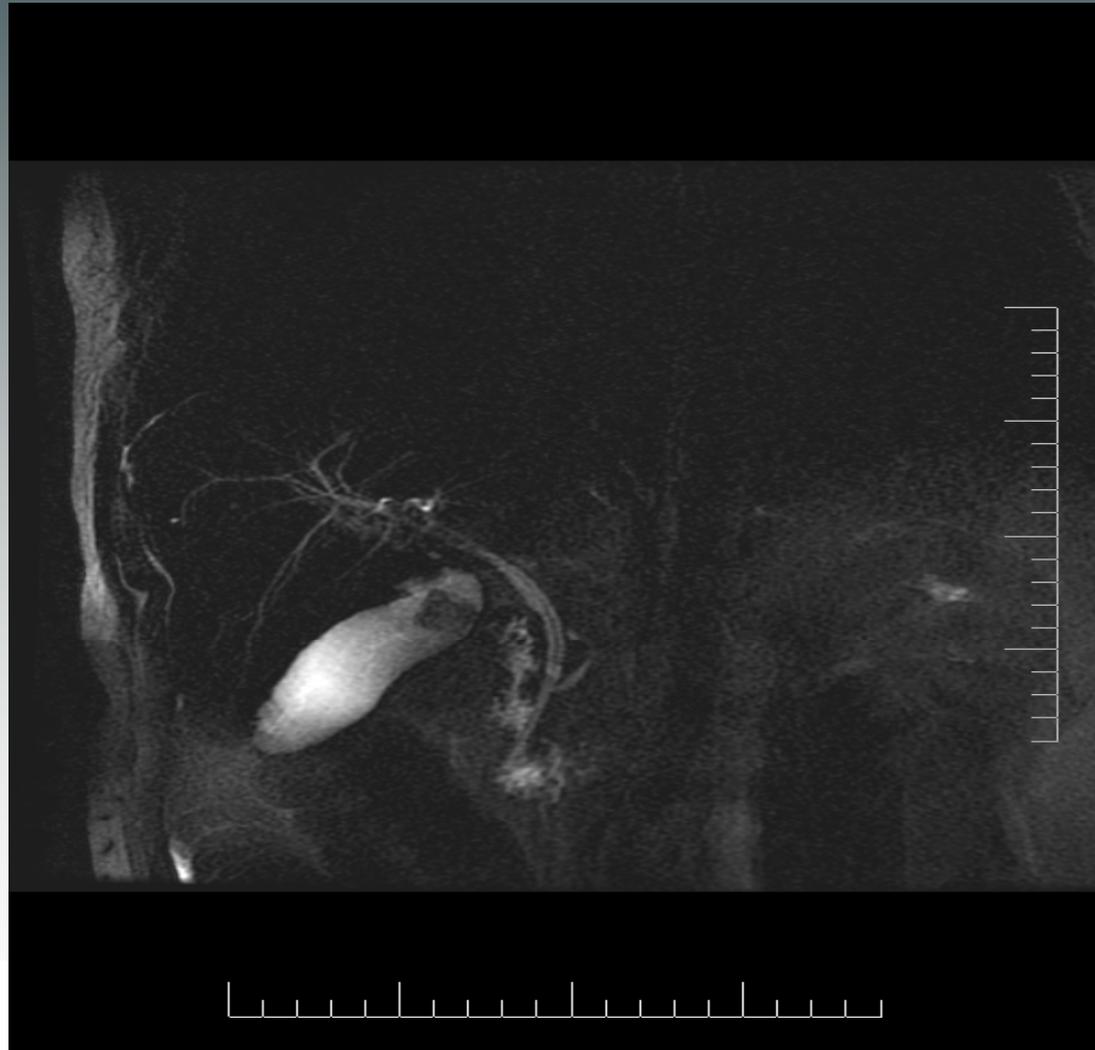


Dx. & Tx

Evaluation



MRCP

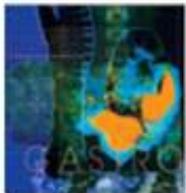


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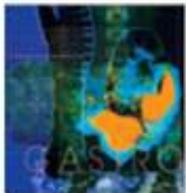
MRCP

- Gallbladder wall thickened 6 mm
- Large gallstones – one impacted in the neck with circumferential soft tissue thickening with deviation of RHD & CHD
- Enhancement of intra and extrahepatic biliary tree – likely inflammation given stent in place



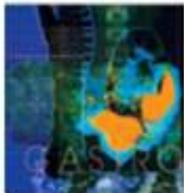
MRCP - conclusion

- Suggestive of cholecystitis with impacted stone in gallbladder neck
- Possibly cholangitis
- Tumor could not be excluded



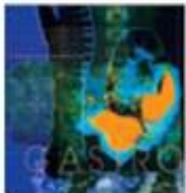
Dx. & Tx

Evaluation



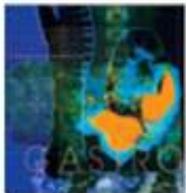
EUS

- Two plastic biliary stents were in place
- Diffused concentric bile duct wall thickening without focal mural mass
- Gallbladder wall 6 mm thickness with calcified shadowing stone in the neck and sludge in the lumen
- Outer gallbladder wall is smooth



EUS

- Cystic duct was shadowed by stone and stents
- 2.2 cm benign appearing porta hepatis lymph node was aspirated for cytology



Differential diagnosis

Primary gallbladder CA with
periductal extension

Cholangiocarcinoma

IgG4 Cholangiopathy

PSC

Cholecystitis with
mirizzi syndrome



Cytology FNA / Lab results

EUS

L.N : lymphocytes
present

ERCP brushing

Atypical granular cells
Favor degenerative
etiology

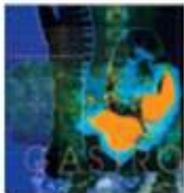
FISH

negative for :
chromosome 3,7,17
and 9p21

IgG4 – 10

CA 19-9 - 4.4

CEA – 1.3



Differential diagnosis & Tx.

CholangioCA

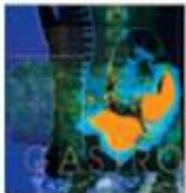


Radical resection
Ex. Rt Lobectomy
Extrahepatic bile ducts resection

CA Vs. Mirizzi

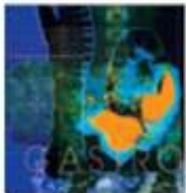


First stage cholecystectomy with
exploration
Second stage for CA



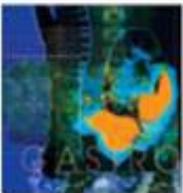
Operation Room

- Open cholecystectomy
- Stiff gallbladder with omental adhesions
- Large stones lodged in the neck of infundibulum which was stuck onto the cystic duct and bile duct
- Cholangiography through cystic duct – stents with good flow



Operation Room

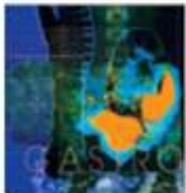
- Cholecystectomy - gallbladder sent to analysis – chronic Inflammation
- No evidence of malignancy



Pathology

- 1.5 cm gallbladder wall thickness
- Patent cystic duct
- Multiple cholesterol stones 1.7 cm
- Gallbladder wall edematous with denuded mucosa

- Acute on chronic cholecystitis

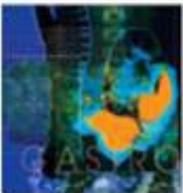


Cholelithiasis

**Chronic
cholecystitis**

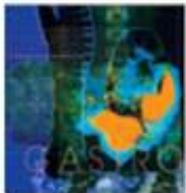
**Mirizzi
syndrome**

**Biliary
strictures**



CholangioCa mimickers

- Cholangiocarcinoma is the second most common primary malignant hepatobiliary neoplasm
- Neoplastic and nonneoplastic conditions of the biliary tract may masquerade as cholangiocarcinoma



CholangioCa mimickers

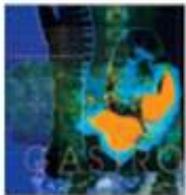
Recurrent pyogenic cholangitis

AIDS cholangiopathy

Autoimmune cholangiopathy

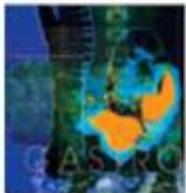
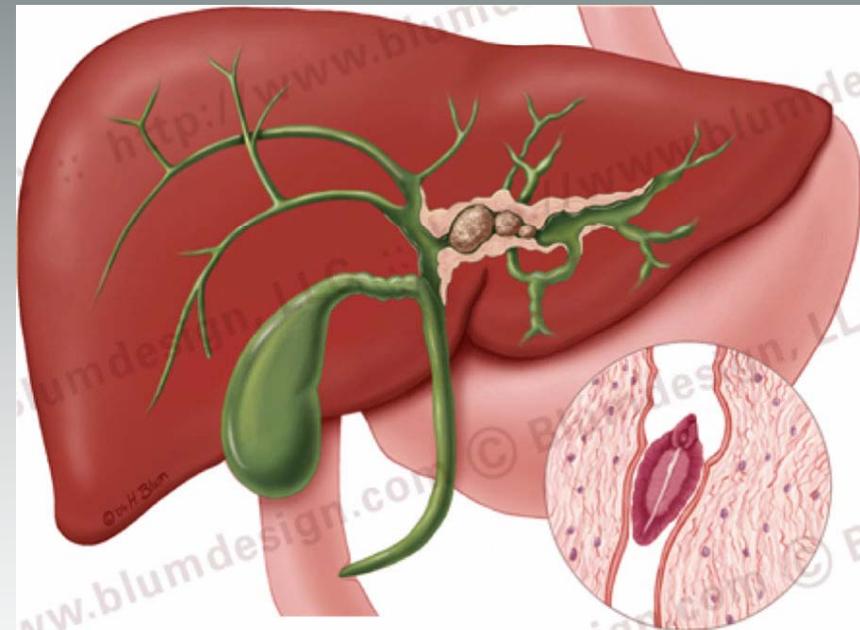
Inflammatory pseudotumor

Xanthogranulomatous cholangitis



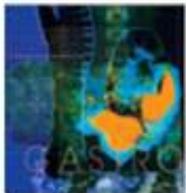
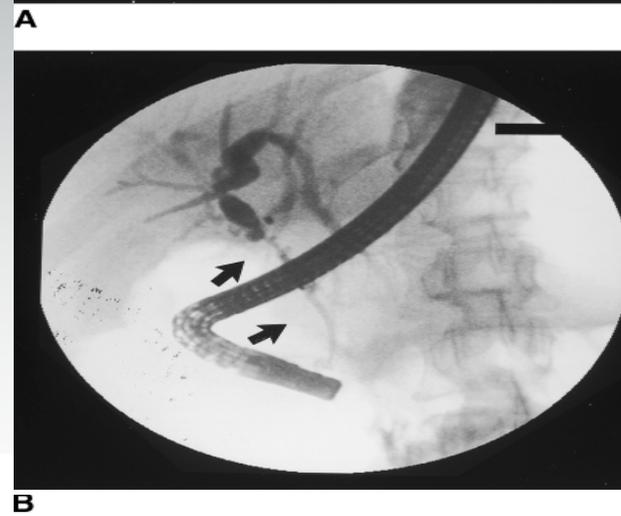
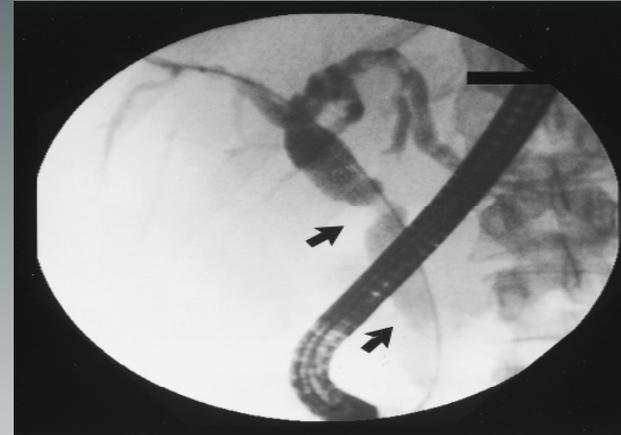
Mimics of cholangiocarcinoma

- Recurrent pyogenic cholangitis – oriental recurrent cholangitis
- Ascaris/ Clonorchis / Opisthorchis – implicated as pathogens
- Predilection for left lobe



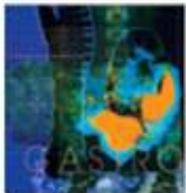
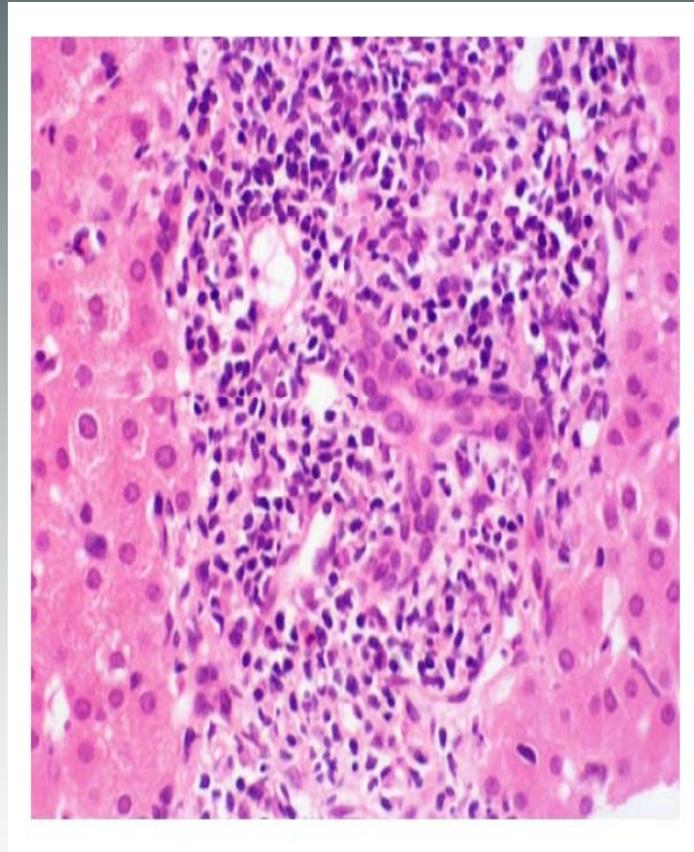
Mimics of cholangiocarcinoma

- AIDS cholangiopathy
 - CMV
 - Cryptosporidium
 - Microsporidium
- MAC



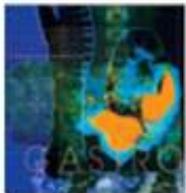
Mimics of cholangiocarcinoma

- IgG4 cholangiopathy
- Pancreas -prominent lymphocyte and IgG4 positive plasma cell infiltration and fibrosis
- Associated involvement of the gallbladder & bile ducts is seen in a subset of patients



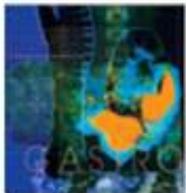
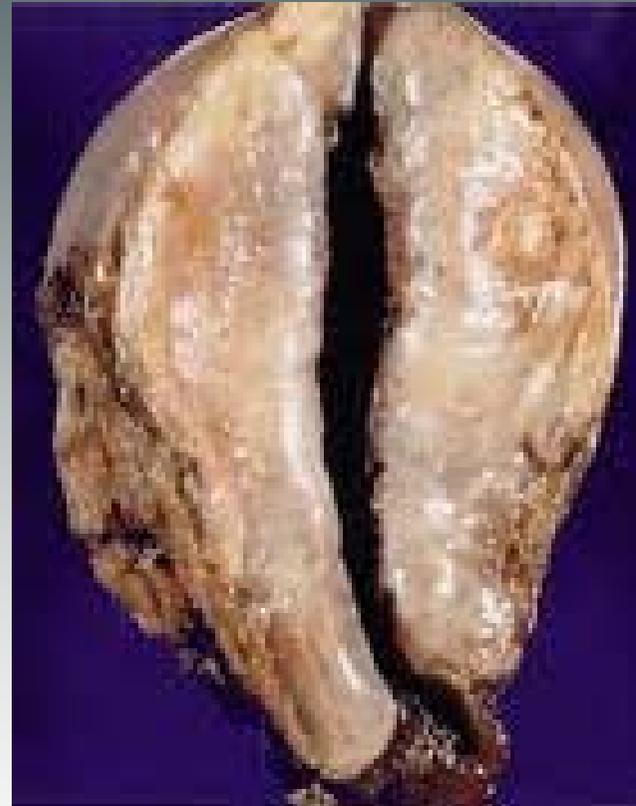
Mimics of cholangiocarcinoma

- Inflammatory pseudotumor
 - Young adults
 - Fever
 - RUQ
 - histology –
inflammatory infiltrate



Mimics of cholangiocarcinoma

- Xanthogranulomatous cholangitis
- Foamy histiocytes and xanthoma cells infiltrate gallbladder wall and extension to adjacent soft tissues



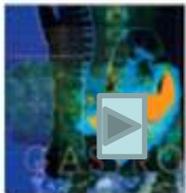
CholangioCa mimickers

Biliary sarcoidosis

Chemotherapy induced biliary sclerosis

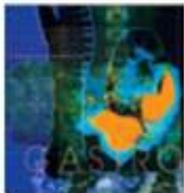
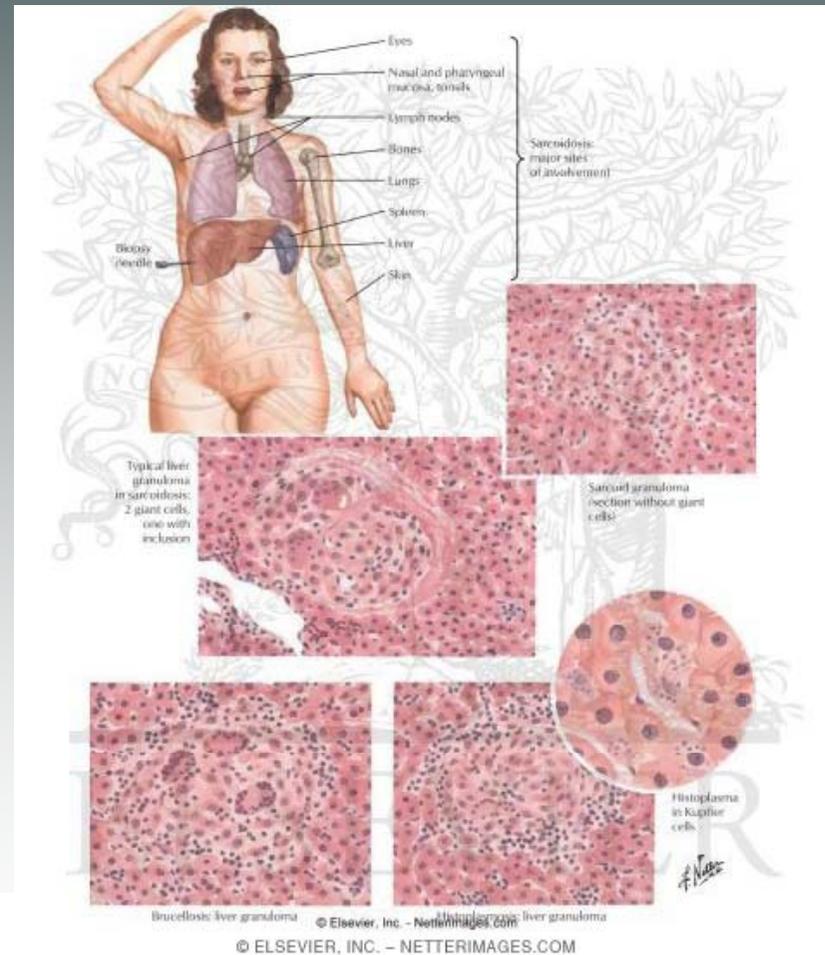
Hepatocellular carcinoma / Intrabiliary metastases

Mirizzi syndrome



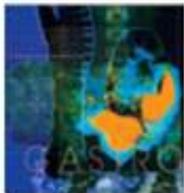
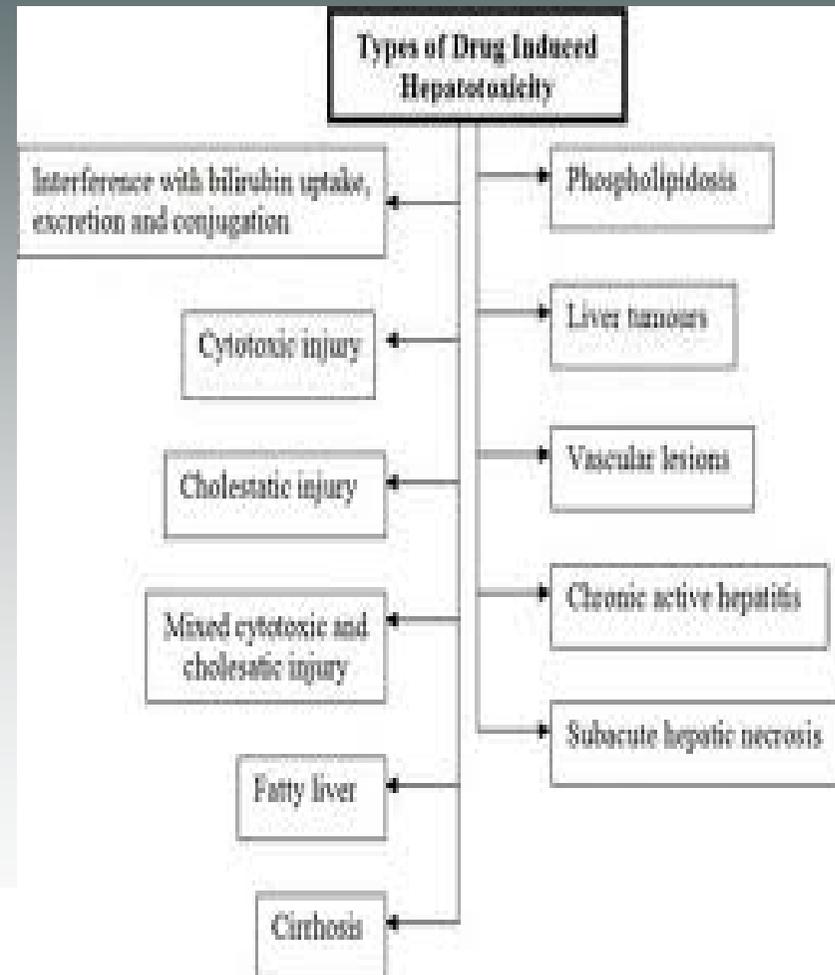
Mimics of cholangiocarcinoma

- Biliary sarcoidosis
 - Granulomatous cholangitis leading to strictures and ductopenia



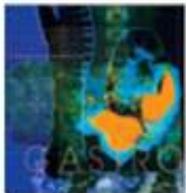
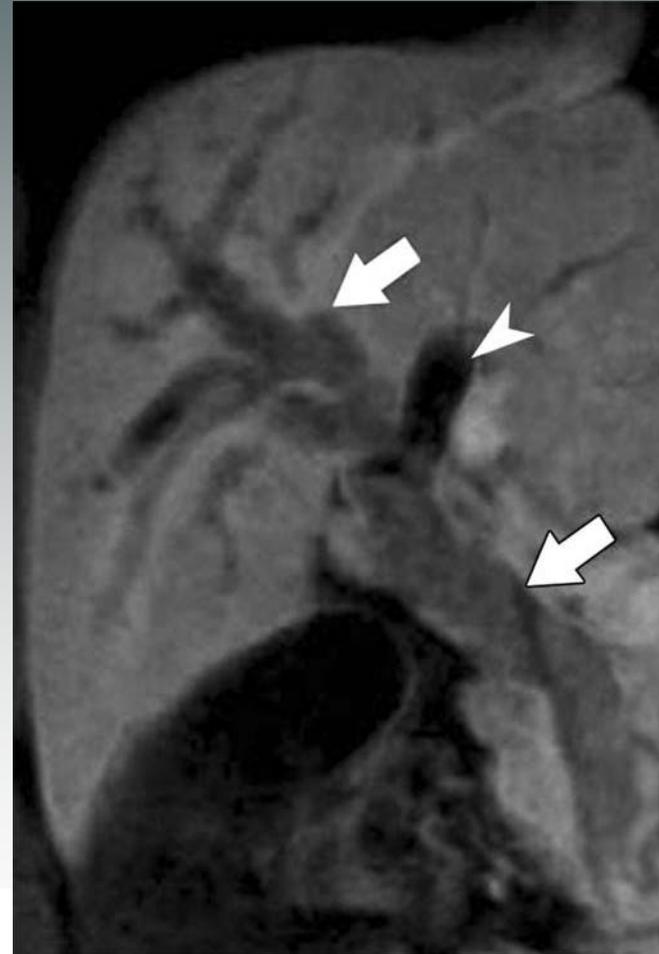
Mimics of cholangiocarcinoma

- Chemotherapy induced biliary sclerosis
- Hepatic artery infusion of chemotherapy



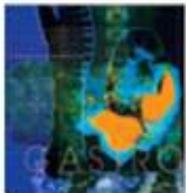
Mimics of cholangiocarcinoma

- Intrahepatic metastases:
 - Lung, breast, gallbladder, colon, pancreas, melanoma, lymphoma, prostate, testicle, leukemia, carcinoid tumors



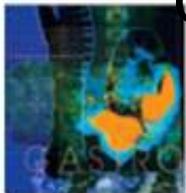
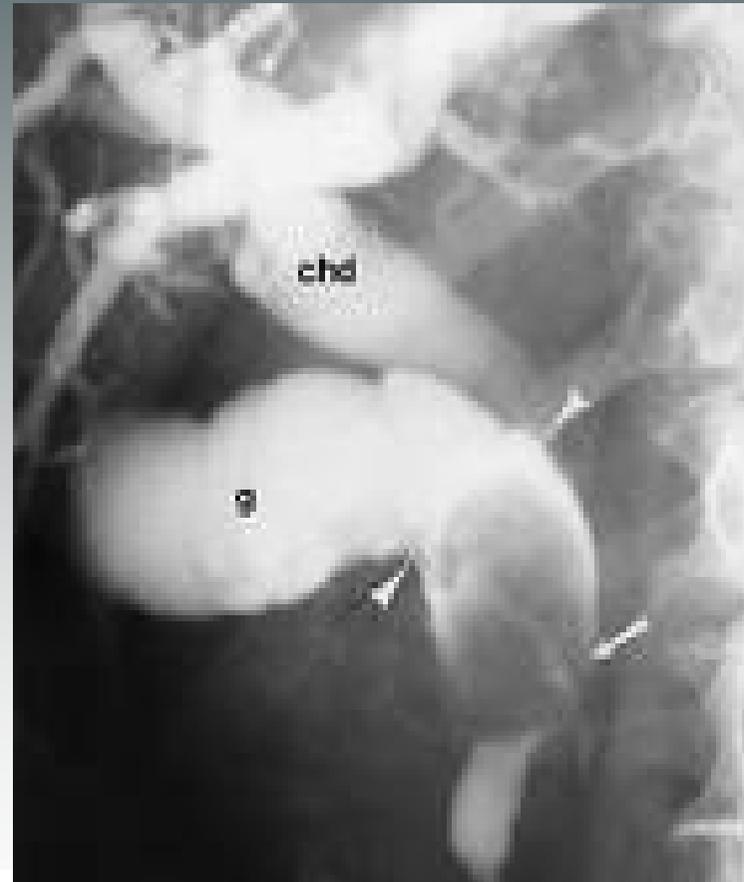
Mirizzi syndrome

- Common hepatic duct obstruction
- Extrinsic compression from an impacted stone in the cystic duct or Hartmann's pouch of the gallbladder
- 0.7%-1.8% of all cholecystectomies



Mirizzi syndrome

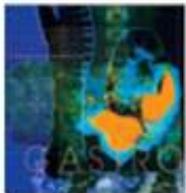
- Two mechanisms:
- Mechanical obstruction of the hepatic duct because of proximity of the cystic duct and the CHD
- Secondary inflammation and frequent episodes of cholangitis



Mirizzi syndrome

- Out of 4,800 cholecystectomies, Mirizzi syndrome was found in 133 (2.8%)
- Seven (5.3%) patients with Mirizzi syndrome had associated GBC
- GBC were a decade older and had longer duration of symptoms

J Hepatobiliary Pancreat Surg.
2006;13(4):323. Prasad TL et al.



PostOp ERCP

