A Case Of Deep Jaundice

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History

- A 44 year old male farmer by occupation came to OPD with complaints of abdominal pain, yellowish discoloration of eyes, reduced appetite and itching all over the body since 2 months.
- The abdominal pain was more in the epigastric region and used to increase with food intake but not with any change in posture. He also gave h/o passing pale coloured stools.
- There was no history of fever with chills / vomiting.

Past History

- He was diagnosed with sputum positive pulmonary tuberculosis in 2006 along with HIV infection.
- He completed treatment for tuberculosis and was regularly taking ART.
- Although his CD4 count on diagnosis was not available his CD4 count in 2015 was 37.
- His latest CD4 count was 169.

Treatment History

- The patient is on
  - Tab.Lamivudine 300 mg HS
  - Tab.Tenofovir 300 mg HS
  - Tab.Atazanavir with Ritonavir boosting(300 + 100) HS

for the past 4 years and Tab.Septran-DS OD since 2006.

Personal history

- Mixed diet.
- Normal bowel and bladder habits.
- No h/o addiction to alcohol / smoking / substance abuse.

On Examination

- The patient was
  - Afebrile
  - Deep Icterus +
  - Mild Pallor +
  - There was no lymphadenopathy.
- BP-110/60 mmhg
- PR-100/min
- RR-18/min

Systemic examination

- Per abdomen :
  - Abdomen was distended with no clinically demonstrable free fluid.
  - Dilated veins with flow away from umbilicus.
  - Liver was non-tender and firm in consistency a liver span of 20 cms.
  - Splenomegaly extending to 11cm below left costal margin.

Rest of the system examinations were normal.

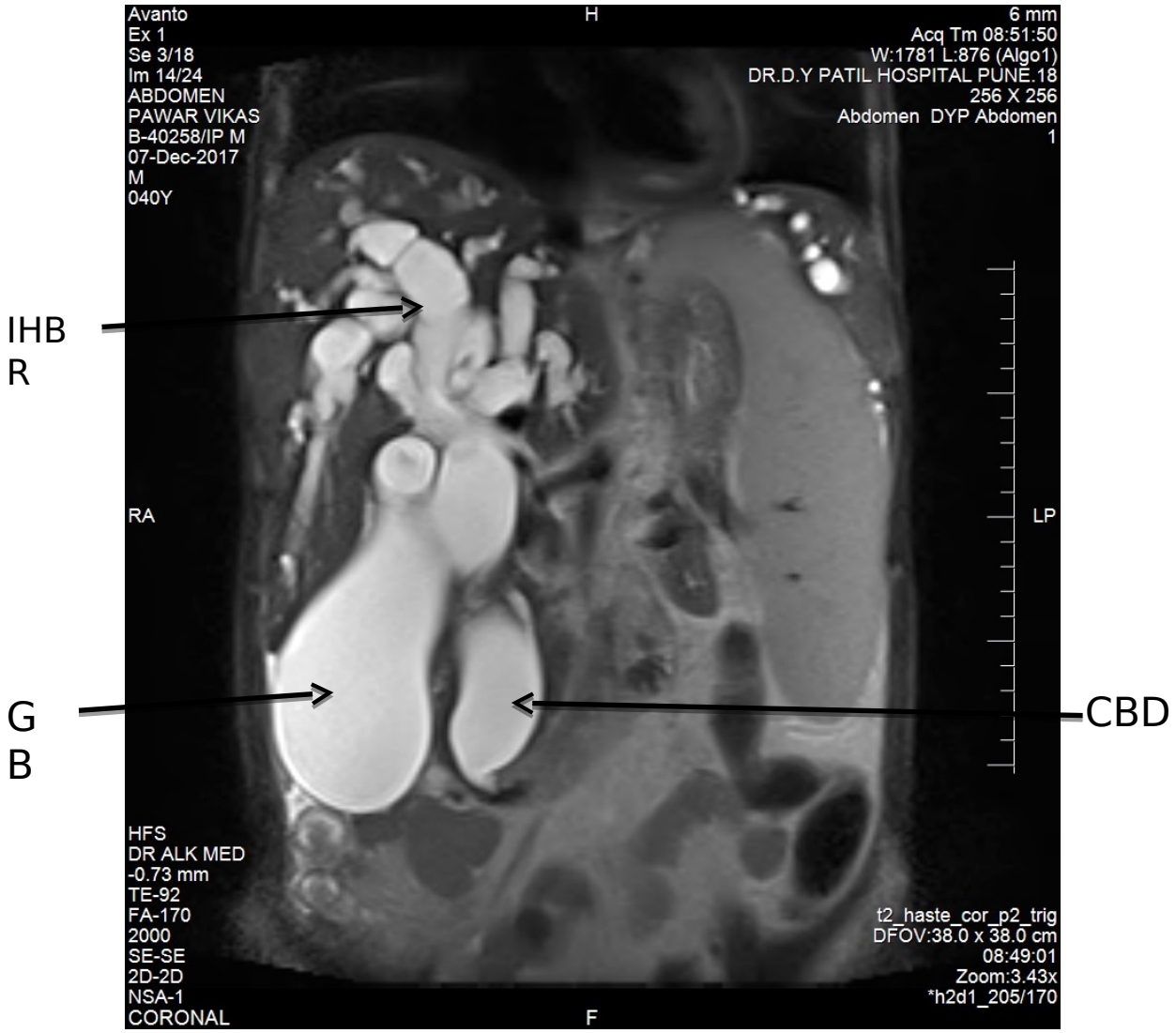
Lab Investigations

Investigation	Result
Hb	9.6 gm/ dl
TLC	7400/ cu.mm
Platelet count	2.6 lakh/ cu.mm
Total bilirubin	25.62 mg/dl
Direct bilirubin	20.63 mg/dl
ALP	1200 U/L
Gamma Glutamyl Transferase	249 U/L (10-40 U/L)

Imaging studies

- Ultrasound abdomen showed:
  - Grossly dilated CBD and pancreatic duct giving double duct sign, splenomegaly with dilated splenic vein, hepatomegaly with dilated IHBR.
- MRCP was done which showed:
  - Hepatosplenomegaly with gross dilatation of biliary tract with tapering of distal CBD just proximal to the ampula of vater - likely due to cholangitis stricture.
  - The gall bladder is well distended with normal walls. No pericholecystic pathology.
  - Pancreas is normal in size and signal intensity.
  - CBD measures 35mm (6mm). Pancreatic duct is dilated 5mm (3mm).

MRCP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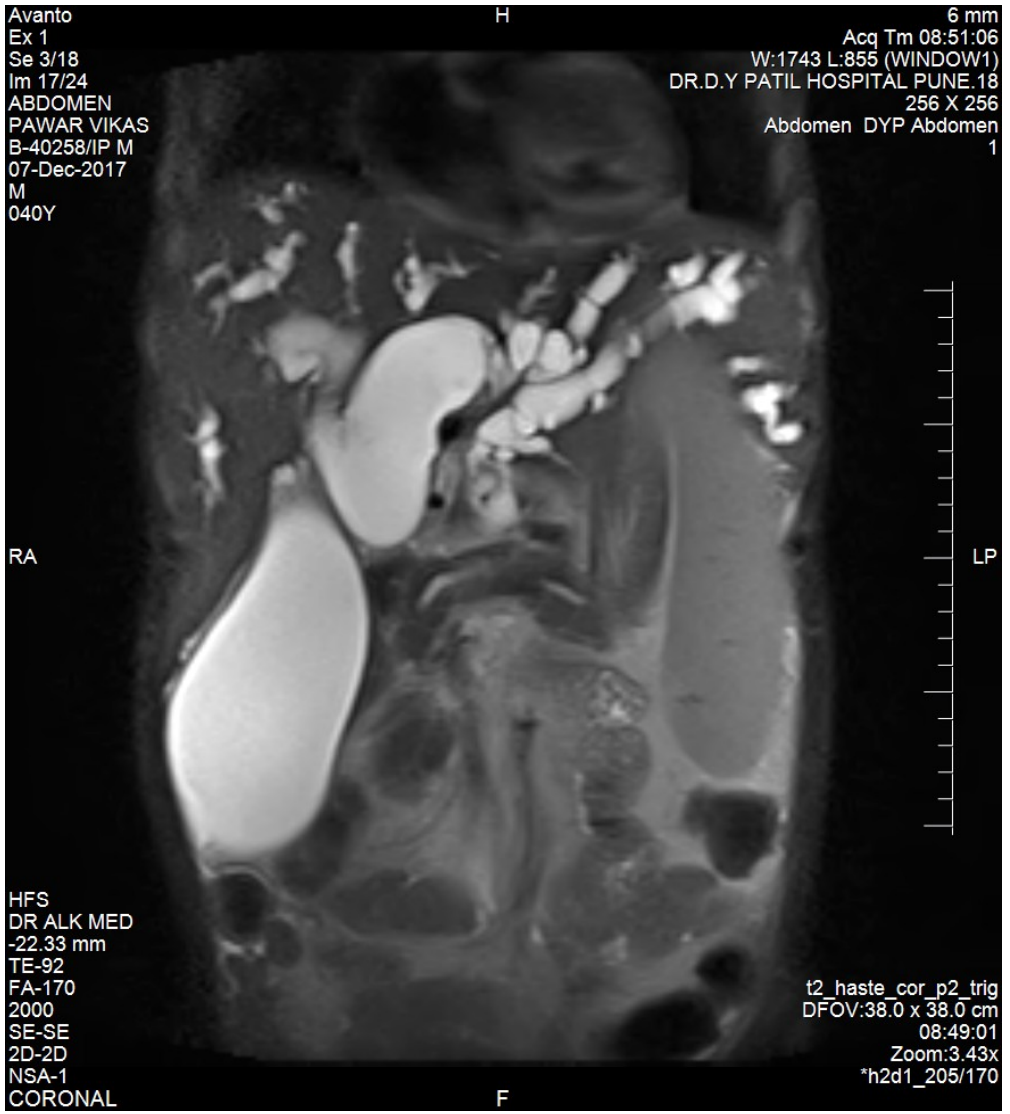
Avanto
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DFOV:38.0 x 38.0 cm
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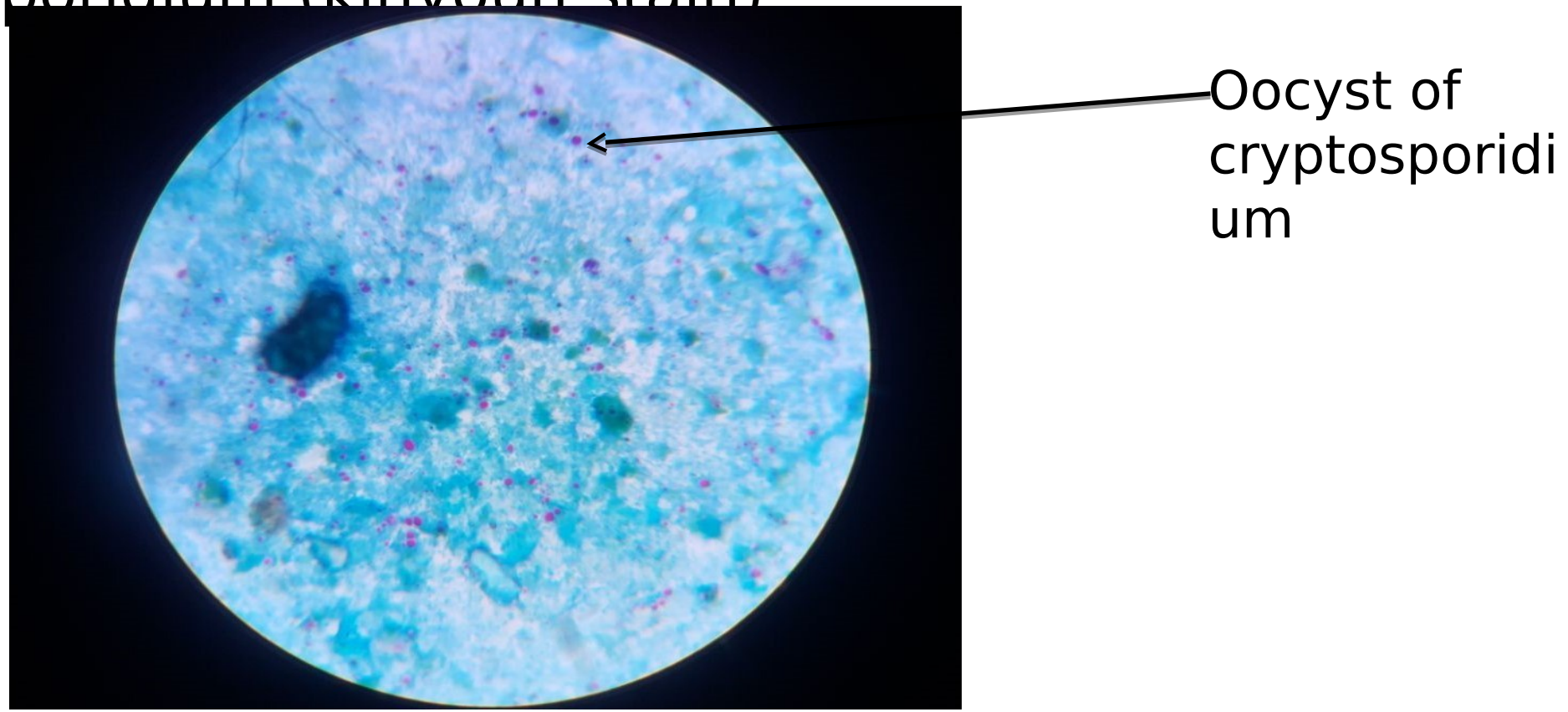
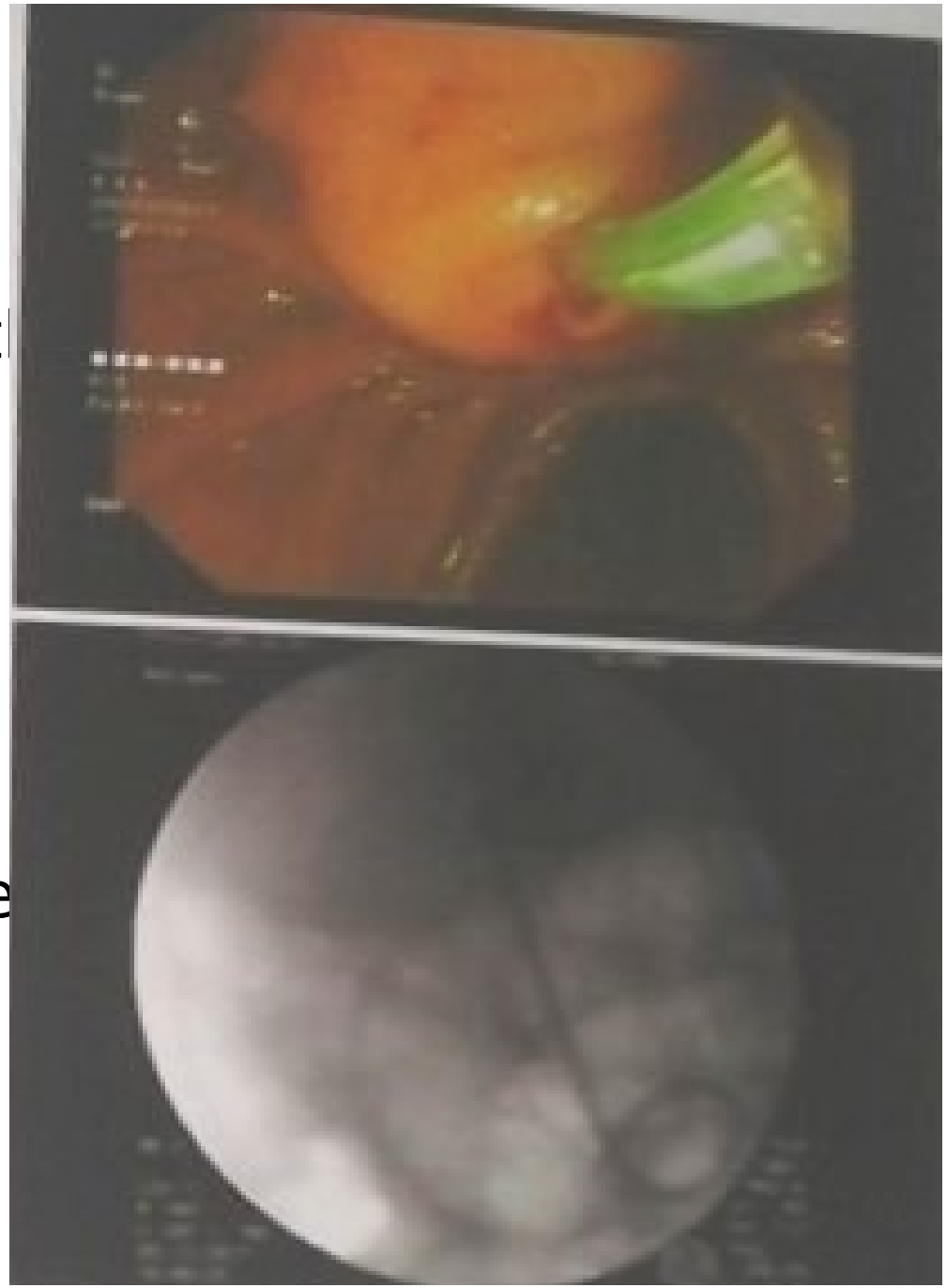
Zoom:3.43x
*h2d1_205/170

- As our patient had obstructive jaundice with no calculi or growth in the biliary tract we suspected AIDS cholangiopathy caused by opportunistic infection with cryptosporidium.
- His stool R/M confirmed the presence of Oocyst of Cryptosporidium (kinyoun stain)



- In view of stricture at distal end of CBD the patient underwent ERCP wit therapeutic papillotomy with CBD stenting was done.
- Post procedure his bilirubin and ALP levels came down by 50% within 48 hours of ERCP and patient showed signs of clinical improvement in the form of reducing icterus and improve appetite.
- The patient was advised to continue the antiretroviral therapy on discharge and has been in regular follow up with us.



Summary

- This is a case of PLHIV with deep jaundice with raised alkaline phosphatase and stricture at the distal CBD which was released by a papillotomy with CBD stenting and stool showing oocyst of cryptosporidium hence our patient had AIDS cholangiopathy.

Discussion

- AIDS cholangiopathy is a biliary syndrome in AIDS patients, which was first described by Cello in 1989. It is diagnosed on clinical features, raised alkaline phosphatase, on ultrasound and ERCP/ MRCP investigation, evidence of cryptosporidium in stool.
- Cello described 4 different entities of cholangiographic abnormalities in AIDS cholangiopathy - papillary stenosis and cholangitis (most common presentation ~ 50%), papillary stenosis alone (30%), intrahepatic sclerosing cholangitis alone (10%), long extrahepatic bile duct stricture (10%).

Discussion

- Opportunistic infections of the biliary tree are believed to be the most common cause of AIDS cholangiopathy.
- The most commonly identified organisms are cryptosporidium and cytomegalovirus. Other opportunistic organisms are microsporidia, cyclospora, *Mycobacterium avium complex, Isospora belli.*
- Intestinal cryptosporidiosis appears to be a major feature of the disease and 10 - 16% of AIDS patients with intestinal cryptosporidiosis develop biliary symptoms.
- Infection of human intestine by cryptosporidium has been reported in immunocompetent and immunocompromised individuals

References

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Thank you !!!