



Intrahepatic Cholangiocarcinoma with Hydatid Cyst: A Case Study

Authors

Prof. Dr. C.V. Kulkarni*, Dr. Meena Mittal, Dr. Narmada Prasad Tiwari*****

*Professor & Head of Department of Pathology
M.Y. Hospital, Indore (MP) 452001

India Mob: +91- 9303232486

**Associate Professor, Department of Pathology M.Y. Hospital
Indore (MP) 452001

India Mob: +91 9826388240

***Chief Resident Department of Pathology M.Y. Hospital, Indore (MP.) 452001

India Mob- +91 8349379620

Correspondence Author

Narmada Prasad Tiwari

MGM Medical College Indore (M. P) India 452001

Email: narmadapdtiwari@gmail.com

Abstract

Parasitic infection leads to cholangiocarcinoma is infection by Opisthorchis sinensis but association between hydatid disease and cholangiocarcinoma is not known. We report a case of hydatid cyst liver with intrahepatic cholangiocarcinoma. Hydatid disease caused by Echinococcus granulosus.

Keywords-- hydatid disease, cholangiocarcinoma, Opisthorchis sinensis. Parasitic infection leads to cholangiocarcinoma

INTRODUCTION

Tape worm has complex life cycle requiring two mammalian host, definitive host are dog and sheep are the usual intermediate host and humans are accidental intermediate host. Infected by ingestion of food contaminated with eggs shed by dog.

CASE REPORT

50 year old male present with pain and swelling over right side of abdomen, loss of appetite and weakness since 3 months. History of bidi smoking and alcohol intake – 20 years. No history of T B/DM/HTN/Abdominal Trauma/any surgery.

Examination

General – thin built

- Pallor .-absent.

- Icterus- present.
- Clubbing-absent.
- Cynosis-absent.
- Edema- absent.
- Pulse-100/70 mmhg
- Respiratory system- air entry decreased on right side.

Investigation

- Hb- 11.5 gm%.
- TLC- 20000/cumm
- DLC- P L M E B -83/12/03/02/00
- Platelet- 3.0 lacks/cumm
- Blood Urea- 36 mg/dl
- Serum Creatinine- 0.8 mg/dl
- Total Bilirubin- 17.1 mg /dl
- Direct billirubin- 11.8 mg/dl
- SGOT- 168 U/L
- SGPT-78 U/L
- Serum total protein- 5.9 gm /dl
- Albumin- 2.7 gm/dl
- Serum alkaline phosphatase- 190 u/l

ULTRASONOGRAPHY

- The liver is enlarged in size and reveals well margined. Complex mass lesion in rt lobe ,the lesion measures about 20 x 13 x 12 cm.
- There are about three solid lesion seen in the liver anterior to the larger mass these lesions are well margined solid and hypoechoic.
- Conclusion- Large complex mass ? Hydatid cyst.
- Three other solid lesion in liver ?granuloma ?? Neoplastic.

CT SCAN

There is evidence of well defined heterogeneously low attenuated large cystic lesion seen in the right lobe of liver Multiple foci of calcification seen in the wall of cystic lesion. There are multiple variable sizes low attenuating peripherally arranged daughter cyst seen within. There are multiple randomly distributed low attenuated lesion in rest of parenchyma.

TUMOR MARKER

- Alpha feto protein – 3.21 Iu/ml
(N – 0.5 – 5.5 Iu/ml)
- Carcino embryonic antigen serum- 2.58 ng/ml
(N - 0.0 - 2.5 ng/ml
and in smokers 0 – 5.0 ng/ml)

HISTOLOGY

- Gross- multiple cystic soft tissue pieces together measuring 10.0 x8.0 2.0. cyst filled with clear fluid.
- Another container labelled as liver tissue conatin single gray brown soft tissue piece measuring 2.0 x 1.0 x 0.2 cm



Fig 1 shows multiple white cyst

MICROSCOPY

H& E stained sections studied shows cyst wall composed of eosinophilic laminated hyaline material. Outer wall consists of fibroblast, mononuclear cell, eosinophils and inner wall show presence of brood capsule and scolices.

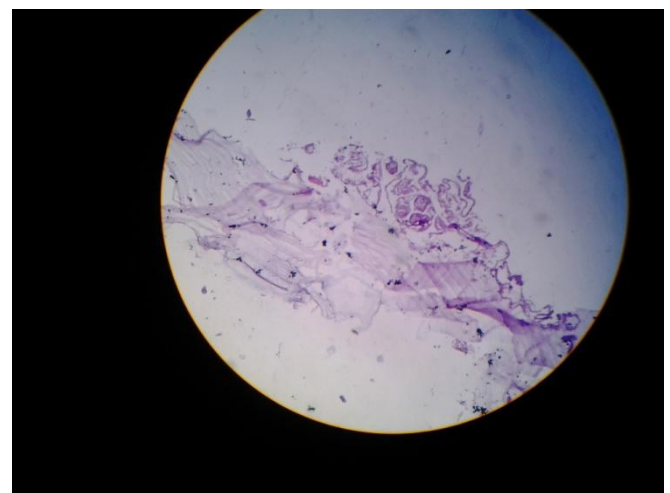


Fig2- hydatid cyst- eosinophilic hyline material and presence of brood capsule and scolices.

Sections studied from liver tissue show fibrocollagenous tissue along with islands of tumour cells arranged in acinar, sheets and trabeculae pattern. The tumour cells show altered nucleocytoplasmic ratio vesicular nuclei eosinophilic cytoplasm. Features are of HYDATID CYST WITH INTRAHEPATIC CHOLANGIOCARCINOMA.

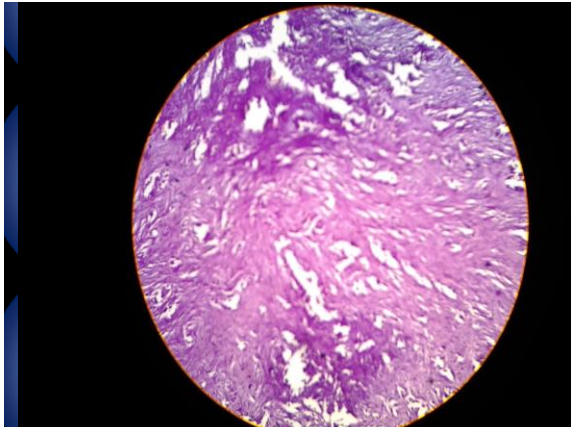


fig 3-Cholangiocarcinoma(low power view)

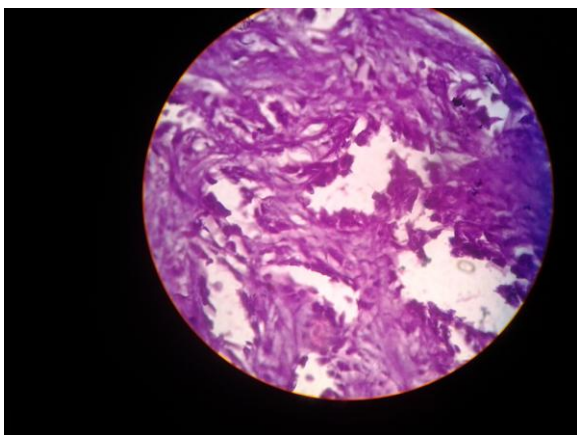


Fig 4- Cholangiocarcinoma(high power view)

DISCUSSION

From clinical, radiological, tumour marker analysis and histological examination it is proved to be a case of hydatid cyst with cholangiocarcinoma – intrahepatic type. Cholangiocarcinoma are malignant tumors arising from the bile ducts. One of the factors associated with the development of malignancy is parasitic infections by helminths trematodes that cause liver fluke infections. This association is very common in south-east Asia, but association

with liver hydatidosis has not established. We report a case in which these two diseases were associated and since radiological findings were not suspicious for these entities. Histology were necessary to prove the presence of intrahepatic cholangiocarcinoma and hydatid cyst.

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