



PRIMARY MUCINOUS ADENOCARCINOMA OF GALL BLADDER- A CASE REPORT

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ABSTRACT Mucinous adenocarcinoma is a rare histological variant of Adenocarcinoma of gall bladder having an incidence of 2.5%. Patients are generally asymptomatic or present with history similar to that of chronic cholecystitis making it impossible to rule out clinically. Histologically, it is important to differentiate it from conventional adenocarcinoma and benign lesions such as adenomyosis of gallbladder as the progression of disease, its therapy and treatment of the disease will differ according to the diagnosis made.

KEYWORDS :

CASE HISTORY

A 60 years old female presented with complains of right upper abdominal pain for 3 days, nausea and vomiting for 2 days and history of weight loss for a period of three months.

On general examination jaundice was observed. On palpation her upper right hypochondriac region was tender and soft. On auscultation, the bowel sounds were normal.

Investigations revealed Hb-10.9 gm/dl, TLC 9000/mm³. There was slight elevation in serum bilirubin.

Gross Examination

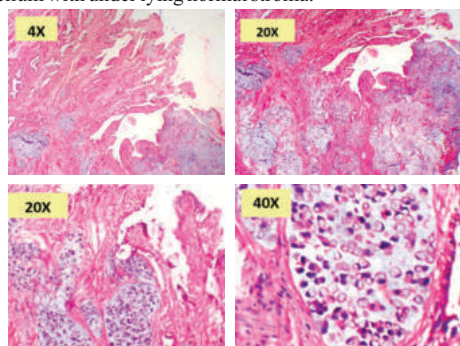
We received a distorted gall bladder specimen in piece meal altogether measuring 9x3x2 cm. External surface is grey white. Cut surface is bile stained showing abundant mucoid material, wall was thickened measuring one cm and bile duct is dilated measuring 2.5x1.5x1 cm.



Microscopy

Sections studied shows structure of gall bladder lined by columnar epithelium. Stroma showing tumour cells infiltration along with mucinous areas showing signet ring cells with eccentric nucleus and vacuolated cytoplasm. Also seen extracellular pools of mucin (>50% of tumor cells) and areas of necrosis. No conventional gall bladder adenocarcinoma areas seen.

Sections studied from bile duct shows tissue lined by benign columnar epithelium with under lying normal stroma.

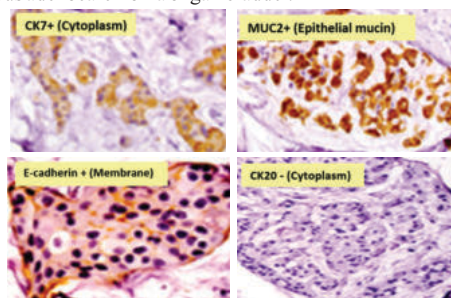


Differential Diagnosis

- Pancreatic ductal adenocarcinoma
- Adenocarcinoma of GIT
- Adenomyosis of gallbladder

Immunohistochemistry

Epithelial markers CK7+, CK20 and CA19-9 are negative. Mucin markers MUC2, E-cadherin are positive. These are indicative of pure mucinous adenocarcinoma of gall bladder.



DISCUSSION

Mucinous adenocarcinoma is a rare sub-type of gall bladder carcinoma with an incidence of 2.5%[1]. Only around 20 cases were reported in the literature till date[1]. It is usually an incidental finding and has a poor prognosis[2][3].

In 2009, WHO classify these tumors as mixed mucinous and pure (colloid) type. The Mucinous adenocarcinomas are termed when extracellular mucin constitute >50% of tumour volume and are seen as mucin pools in which neoplastic cells float in small clusters or signet cells. The pure (colloid) mucinous carcinomas are tumors in which >90% mucinous pattern is observed. Various risk factors such as gall stones, porcelain gall bladder, choledochal cyst, pancreatic ductal adenocarcinoma, sclerosing cholangitis etc. are described for gall bladder carcinoma. Clinically mucinous adenocarcinoma presents as abdominal pain, jaundice associated with anorexia and weight loss. This is the same presentation we found in our case.

Mucinous adenocarcinoma of gall bladder is mostly an incidental finding. It is often misdiagnosed as well differentiated mucinous adenocarcinoma from benign lesions such as adenomyosis of bladder[4]. The mean age group affected is 65 years with female preponderance (M:F=1:1.2) as observed by Dursan N et al[4]. Our case shows a 60 years female corresponding to the age of presentation. There have been descriptions of other variations, including hepatoid adenocarcinoma, signet ring cell carcinoma, squamous or adenosquamous cell carcinoma, cribriform carcinoma, papillary adenocarcinoma, and undifferentiated carcinoma. In our case it is reported as Well differentiated mucinous adenocarcinoma of gall bladder.

The differential diagnosis such as pancreatic adenocarcinoma, adenocarcinoma of GIT and adenomyosis of gall bladder have been eliminated with the help of immunohistochemistry.

CONCLUSION

Primary well differentiated mucinous adenocarcinoma is a rare entity often under-diagnosed as adenomyosis of gallbladder due to the presence of rokitansky aschoff sinuses in the latter. Only about 20 cases till date has been reported in literature. We are presenting this case for its rarity and its histopathological features.

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