

Gallbladder carcinoma – A case report and review of literature

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Abstract; Carcinoma of gall bladder is a rare entity. Adenocarcinomas represent 80-95% of biliary tract cancers. We report a case of adenocarcinoma of gall bladder in a 60 year old female patient, presented as acute abdomen. It was diagnosed as adenocarcinoma, T2NxMx, stage Ib. We report this case in view of its rarity.

Keywords: adenocarcinoma, gall bladder, acute abdomen.

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I. Introduction :

More than 90% of gall bladder carcinomas are adenocarcinomas, most of them are of pancreatico biliary type.⁽¹⁾ Most common etiology is gall stones followed by cholecysto enteric fistula, porcelain gall bladder, obesity, adenomyomatosis, familial adenomatous polyposis, Gardner syndrome.^(1,2) F>M ratio is 3-4:1.

Case history : 60 year old female patient presented with acute abdomen. Emergency laparotomy is done, on noticing a perforation in the gallbladder, cholecystectomy is done. U/S abdomen showed normal Liver and pancreas. There are no other lesions. There is no previous history of cholelithiasis.

Gross ; we received a subtotal cholecystectomy specimen of size 8x4x2 cms, a perforation of 2x2 cms is noticed at the body and a fungating, friable growth on the mucosal aspect, measuring 2x0.5 cms. Rest of the mucosa is unremarkable. Wall of the gall bladder is thickened measuring 0,5 cms.(fig1). No gall stones are found.

Microscopy ; Sections studied from the growth show a tumor composed of pleomorphic cells arranged in glandular and complex branching papillary patterns. Tumor is infiltrating in to the serosa. Invasive component is associated with Intra cholecystic papillary tubular neoplasm(ICPN).Fig2&3). Areas of necrosis are also seen. A fragment of liver tissue is seen attached to the wall of the gall bladder. It is reported according to CAP protocol. PTNM stage is T2NxMx. Stage Ib. adjacent liver tissue is seen.

II. Discussion

Primary adenocarcinoma of gall bladder is a rare entity. Clinically patients present with right upper quadrant abdominal pain and anorexia. There may be increased levels of alkaline phosphatase.

Up to 30% are not apparent grossly. They appear as diffuse or nodular polypoid or papillary masses. 70-8-% arise in the fundus. 1/3rd arise in the body and remaining 10% in the neck. In most patients, the tumor is diagnosed by the pathologist after a routine cholecystectomy for a benign disease and is termed “incidental or occult gallbladder carcinoma” (IGBC).⁽³⁾ Flat lesions can be missed, so a thorough grossing is important.

Due to its early vague symptoms and the gallbladder's lack of serosa to slow its spread, gallbladder carcinoma typically presents at advanced stages and carries a 5-year survival rate of less than 5%. Inconspicuous and ill-defined symptomatology, together with the aggressiveness of the disease, gives gall bladder carcinoma high mortality rates and restricted overall survival.⁽⁵⁾ Surgery is the only curative treatment and should be associated with adjuvant therapy in more advanced cases. Screening efforts are limited due to the paucity of symptoms as well as the lack of a cost-effective focus mechanism for early stage detection. The high rates of local recurrence and micro-metastases even for those considered surgically curable, renders clinical management challenging.⁽⁶⁾

Microscopically > 90% are adenocarcinomas of pancreatico biliary type. Well formed glands with wide lumina lined by one or few rows of atypical cuboidal cells surrounded by dense cellular stroma arranged concentrically. Cytoplasm can be eosinophilic, clear or foamy. Other morphological variants are Adenosquamous carcinoma, mucinous where >50% extracellular mucin, clear cell adenocarcinoma, signet ring cell, intestinal type with goblet cells, cribriform, lymphoepithelioma like carcinoma, neuroendocrine carcinoma.

Differential diagnoses are cholangiocarcinoma, Contiguous spread from carcinoma of extrahepatic biliary tree, a periampullary carcinoma. cholangiocarcinoma can be differentiated using IHC which is CK7+/CK20-ve where as gall bladder carcinoma is both CK7/CK20 +ve.

III. Conclusion

In the present case ,there is no other primary detected, so it is diagnosed as primary adenocarcinoma of gall bladder .

References

- [1]. Laura W.Lamps in gallbladder and extrahepatic bile ducts.Rosai and Ackerman's surgical pathology, 11th ed,John R.Goldblum, editor,Elsevier,Philadelphia. volI; 861-870.
- [2]. N.Volkan Adsay in Gallbladder, extrahepatic biliary tract, and ampulla. Sternberg's diagnostic surgical Pathology, 6th ed, StaceyE.Mills editor, Wolters Kluwer, Philadelphia.vol 2 ;1788-1886.
- [3]. Thorsten Oliver Goetz. Gallbladder carcinoma: prognostic factors and therapeutic options. World J gastroenterol 2015;21:12211-12217.
- [4]. William Patrick Boyan Jr.a, c , Stephen Klepnera , Michael Farra , Adam Kopelanb, Prakash Paragib, Kevin Clarke. A Month for Gallbladder Cancer: A Case Report of Four Gallbladder Cancers Over a 30-Day Period at a Community Hospital.World J Oncol. 2015;6:495-498.
- [5]. Rodrigo Nascimento Pinheiro1, *, Renata P. Fontoura2, Leticia L.P. Rodrigues2, José Donato S. Netto2, and Bruno José Q. Sarmento. Incidental finding of adenocarcinoma in a gallbladder lumen with no wall involvement. Journal of Surgical Case Reports, 2020;6, 1–3.
- [6]. Ravi Maharaj a, Christo Cavea,*, Kevin Sarrana, Nigel Bascombea, Dilip Dana, Wesley Greaves a, Wayne A. Warner b. A case report of the clear cell variant of gallbladder carcinoma. International Journal of Surgery case reports 2017;32:36-39.



Fig 1: Gross picture showing thickened wall and papillary growth.

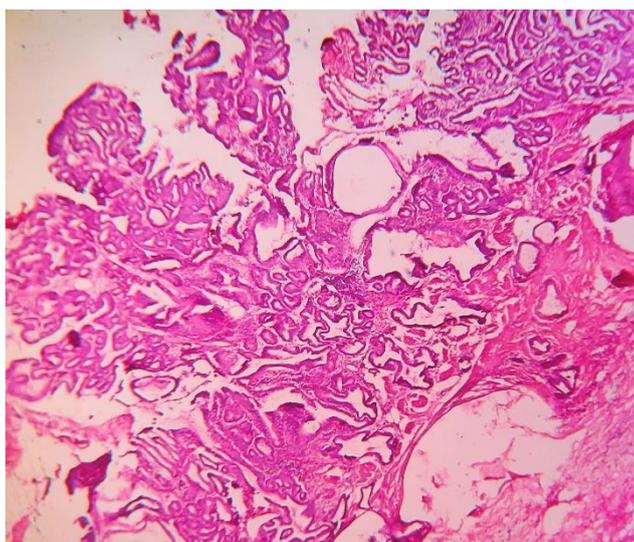


Fig 2: H&E10x10 showing papillary fronds

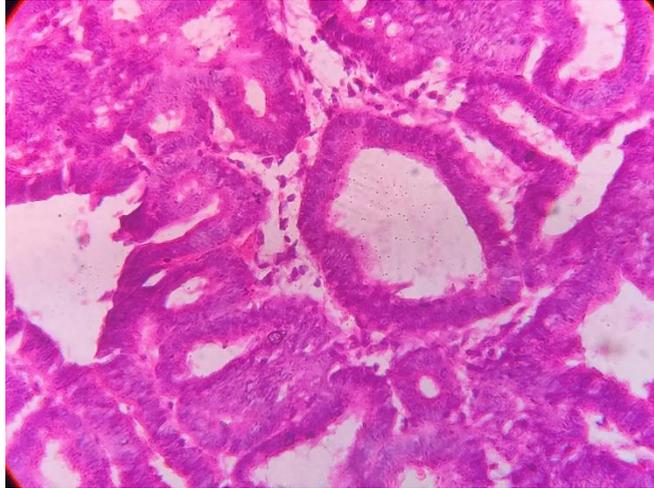


Fig:3: H&E 10x40 showing well formed glands lined by pleomorphic cells.

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