

Squamous Cell Carcinoma of Gall Bladder: A Rare Presentation

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ABSTRACT

Pure Squamous cell carcinoma of the gall bladder is a rare entity. Here we present a case of 50-yrs-female presented to our hospital with intermittent upper abdominal pain, jaundice, anorexia, weight loss for last 6 months. On ultrasonography it was found that, there was presence of mass measuring (8x7) cm in gall bladder region. Subsequently, exploratory laparotomy was done and gall bladder along with liver bed and adjacent lymph node surgically removed. Histopathologically the case was diagnosed as well differentiated squamous cell carcinoma infiltrating upto serosa without involving liver bed or lymph node.

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Introduction

Gallbladder carcinoma is rare; however, within the biliary tract, the gallbladder is the most common site for malignancy and is the fifth most common site among gastrointestinal tract-related organs [1]. Squamous cell carcinoma of the gall bladder is rare and accounts for 12.7% of all cases of gall bladder cancer. Pure squamous cell carcinoma is even less common with incidence of 3.3% [2-5]. Squamous cell carcinoma of the gall bladder usually presents with an ill defined clinical course and is frequently detected in an advanced stage because of its tendency to infiltrate adjacent organs and silent rapidly growth pattern [2,3]. The overall prognosis of squamous cell carcinoma is better than adenocarcinoma [4].

Case Report

A 50yrs old female patient presented in the OPD in our hospital with history of pain abdomen, jaundice, anorexia and weight loss for last 6 months. On general examination there was presence of icterus. On local examination there was tenderness in right upper abdomen. Routine investigations revealed raised bilirubin level with elevated liver enzymes. On ultrasound it was found that there was presence of a mass in the gall bladder measuring (8x7) cm with mild ascites. (fig 1) Subsequently, open laparotomy done and gall bladder with mass along with liver bed and adjacent lymph node surgically removed and sent for histopathological examination.

On gross examination there was a greyish mass measuring (9x8x2) cm³ containing, gall bladder and liver bed (fig 2). On cut section whitish areas were noted. Normal anatomy of gall bladder totally distorted. Multiple sections were taken. On histology the sections showed neoplastic cells were arranged in diffuse sheets of cells extending into the muscle layer upto serosa. Individual cells were large, polygonal containing abundant eosinophilic cytoplasm, pleomorphic vesicular nuclei and prominent nucleoli. There was also presence of intracellular bridges and numerous keratin pearls (fig 3 ,4 &5). Sections from liver bed and lymph node do not show any tumor deposit. Histologically the case was diagnosed as infiltrating moderately differentiated squamous cell carcinoma extending upto the serosa.

Discussion

Squamous cell carcinoma is a rare and aggressive form of gall bladder carcinoma. It usually presents as invasive growth and spreads by local invasion. Squamous cell carcinoma of the gallbladder is predominantly incident among females, in a proportion of 3:1 over males, The mean age for squamous cell carcinoma of gall bladder

is between 4th and 6th decade [5]. Our case presented at age of 50. Gall bladder cancers are asymptomatic at early at early stages. When symptomatic, the presentation is similar to biliary colic or chronic cholecystitis. If signs of biliary colic or chronic cholecystitis present in an elderly patient along with weight loss and anorexia, gall bladder carcinoma should be suspected. [7]

The histogenesis of squamous cell carcinoma is not well understood. Epithelial tumor genesis is a multistep process resulting from sequential genetic alteration at different stages of evolution. Because a normal gall bladder has no squamous epithelium, the source of origin is questionable. Some researchers have stated that squamous cell carcinoma originates from pre-existing squamous metaplasia of gall bladder epithelium, while others concluded that it originates from squamous metaplasia of neoplastic cells of adenocarcinoma [4,6]. Genetic changes also have been identified along with mutations that consist of decreased expression of 23nm and over-expression of c-erb B2 gene product. [8]



Fig. 1: ultrasonography showing mass in gall bladder region.



Fig. 2: Gross picture of gall bladder and liver bed showing the mass.

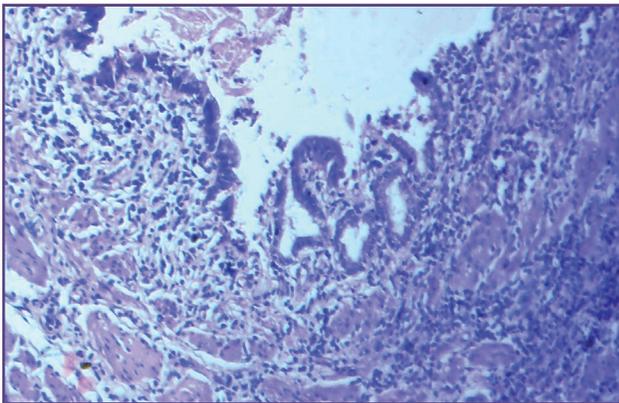


Fig. 3 : Histological examination of gall bladder showing columnar epithelium (H&E 100X)

The etiology and pathogenesis of squamous cell carcinoma is not well understood; however, two important presumptive causative possibilities are gallstones and parasitic infestation^[6,9]. Other pathologies that have been associated with increased incidence of carcinoma of gall bladder are polypoid lesions, adenomas, calcified porcelain gall bladder, ulcerative colitis, adenomyomatosis, polyposis coli and anomalous connection between CBD and pancreatic duct. Traditionally it has been said that adenosquamous and squamous cell carcinoma have very poor prognosis. However, because of the better prognosis of pure squamous cell carcinoma it is important now to differentiate it from adenocarcinoma with squamous differentiation from. Pure squamous cell carcinoma of the gallbladder grows slowly, is usually localized and rarely metastasized. On the other hand adenosquamous carcinoma is aggressive and metastasizes widely^[4]. Radical resection is the mainstay of treatment for patients with locally invasive squamous cell carcinoma and offers the only

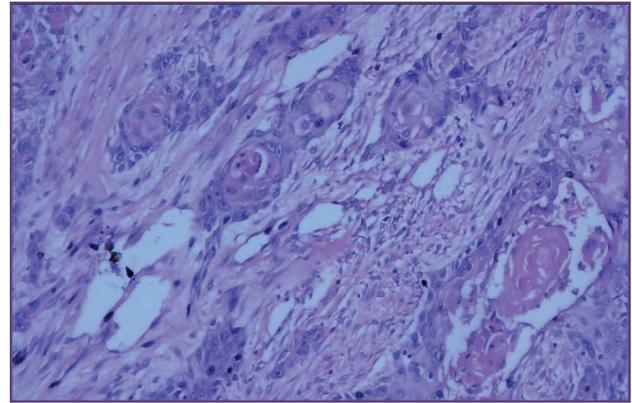


Fig. 4: Histological examination: shows infiltrating well differentiated keratinized squamous cell carcinoma of gall bladder (H&E 100X)

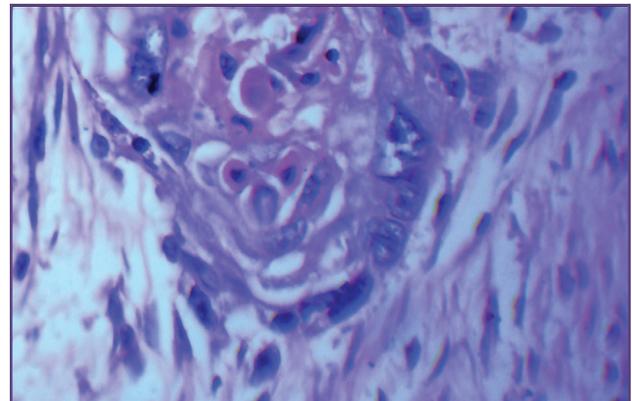


Fig 5 : Microscopic examination reveals tumor composed of well differentiated squamous cells characterized by keratin pearls and intercellular bridges (H&E 400X).

chance for cure^[3] extent of tumor invasion at the time of diagnosis is the most important parameter in determining survival. Significant prognostic factors include residual tumor status, type of resection, patient age, and blood vessel invasion.

Conclusion

Pure squamous cell carcinoma of gall bladder is a rare entity. Radical resection is the mainstay of treatment for locally invasive squamous cell carcinoma. Early diagnosis is the most important parameter for improving the survival of the patient.

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Competing Interests

None Declared

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