

**Primary Pure Squamous Cell Carcinoma of Gall Bladder; a Rare Case****Nazia Bhat<sup>1</sup>, Bilal A Sheikh<sup>1</sup>, Junaid Nazier<sup>2</sup>, Humaira Bashir<sup>1</sup>, Ambreen Beigh<sup>1</sup>, Summiya Farooq<sup>1</sup>, Naila Nazier<sup>1</sup>**<sup>1</sup>Department of Pathology, Government Medical College Srinagar, India<sup>2</sup>Department of Radiodiagnosis, Skims Medical College Srinagar, India**\*Corresponding author**

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**Abstract:** Squamous cell carcinoma of gall bladder is a rare neoplasm. It usually is detected at an advanced stage because of its tendency to infiltrate adjacent organs and silent rapidly growth patterns. The prognosis of squamous cell carcinoma is worse than ordinary adenocarcinoma. Here we present a case of squamous cell carcinoma of gall bladder in a 67 yr old.**Keywords:** Carcinoma, gall bladder, Organ, Squamous cell

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**INTRODUCTION**

Gall bladder carcinoma is the fifth most common malignant neoplasm of the gastrointestinal tract and most frequent tumor of the biliary tract [1]. Adenocarcinoma are by far the most frequent histological subtype of the malignant gallbladder neoplasms representing 90-95% of all cases[2]. Squamous cell carcinoma being rare constitutes only about 12.7% of gall bladder tumors. Pure squamous cell carcinoma is even less common with a reported incidence of 0 to 3.3% of all gall bladder cancers [3,4]. It usually presents with an ill defined clinical course and is frequently detected at an advanced stage because of its tendency to infiltrate adjacent organs and silent rapidly growth patterns [5].

**CASE REPORT**

A 70yr old female presented in surgical outpatient department with painless swelling in right upper abdomen from last 6 months .Swelling was progressively increasing in size. On examination patient was pale but average build .On deep palpation a large mass measuring 10x12 cms was palpable in the right hypochondrium. Mass was solid, smooth but slightly boss elated Her routine blood tests showed a hemoglobin level of 8.5gm%. The liver function tests were within normal limits. Ultrasonography showed a large homogenous echo texture mass measuring 12x12cms in the right upper abdomen with a diagnosis of GIST. CECT of abdomen revealed a enhancing mass measuring 12x7.5 cms involving right upper abdomen and abutting gall bladder and portion of liver. On exploratory laparotomy, resection of growth along with cholecystectomy and side-side colocolonic anastomosis (transverse colon) was done. Multiple lymph nodes retro duodenal, parabolic and cystic lymph node were

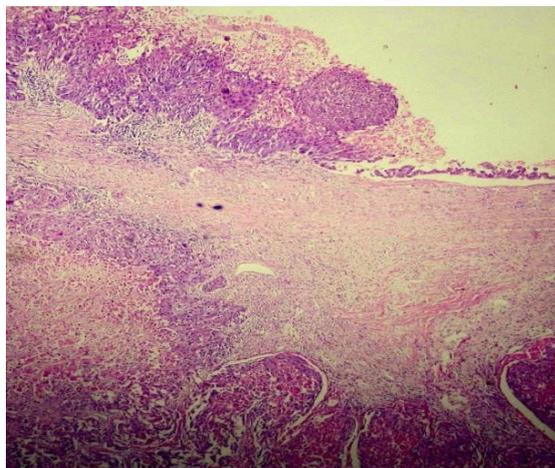
also dissected. Provisional diagnosis of? GIST?? Colonic growth was made. Her postoperative period was uneventful and patient was discharged 10 days after delivery. Macroscopic examination of the specimen revealed a large mass measuring 10x8cms involving whole of the gall bladder and infiltrating into adjacent colon (Fig1).C/S revealed a highly friable/W mass involving lumen of the gall bladder (Fig2). The mass seemed to arise from mucosa of the gall bladder.

Microscopic examination ,revealed native gall bladder mucosa lined by columnar epithelium with abrupt transition to malignant metaplastic squamous epithelium with infiltration into muscle layer and serosa of gall bladder( fig3) The tumor also showed infiltration into adjacent colon through serosal side extending through muscularis propria up to lamina propria of colon.(Fig4).

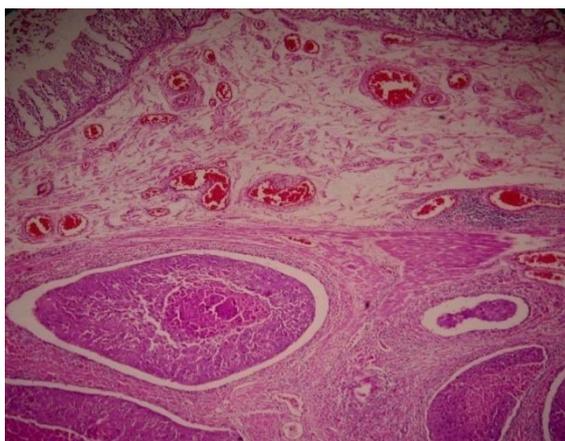
**Fig 1: large tumor mass involving gall bladder and invading adjacent structures (gross)**



**Fig 2: C/S revealed a highly friable G/W mass involving lumen of gall bladder (gross)**



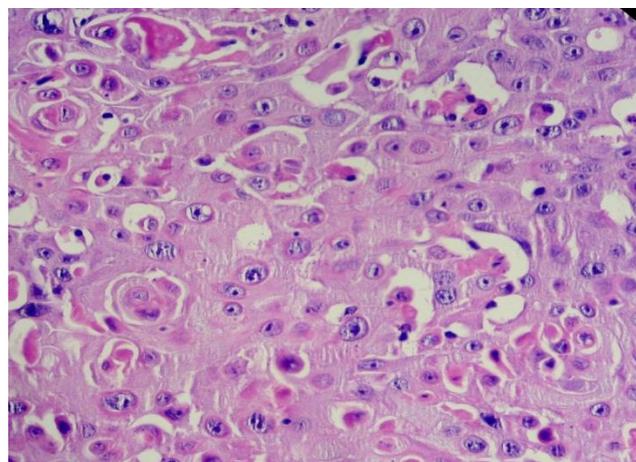
**Fig 3: Native gall bladder mucosa lined by columnar epithelium with abrupt transition to malignant metaplastic squamous epithelium with infiltration into muscle layer and serosa of gall bladder (low power view)**



**Fig 4: Infiltration of tumor into colonic wall through serosal side (low power view)**

Tumor was arranged in nests and solid sheets with areas of comedo necrosis. Individual neoplastic cells were large round to polygonal having well defined

cell borders having abundant eosinophilic cytoplasm and hyper chromatic nuclei. At places vesicular nuclei with prominent nucleoli was also seen. Keratin pearl formation and many dyskeratotic cells were also seen. (Fig 5)



**Fig-5: Tumor composed of well differentiated squamous cells, individual cell keratinisation and intercellular bridges (high power view)**

Lymph nodes dissected were free of tumor. Diagnosis of well/moderately differentiated squamous cell carcinoma-gall bladder was made.

#### DISCUSSION

Primary squamous cell carcinoma is a rare and aggressive form of gall bladder cancer with an overall incidence of 0 to 12.7% [6]. The incidence of pure squamous cell carcinoma is still lower with a reported incidence of 0 to 3.3% of all gall bladder cancers [7]. Squamous cell carcinoma of gall bladder usually occurs in the elderly age group in sixth to seventh decade of life. It shows a female preponderance with F: M ratio of 3-4:1.8

Squamous cell carcinoma of gall bladder usually presents as an invasive growth, a low tendency towards lymph node metastasis and a higher incidence of local infiltration and hepatic metastasis. Patients with squamous cell carcinoma of the gall bladder have poorer prognosis than patients presenting with adenocarcinoma [5, 9]. Etiology of squamous cell carcinoma of gall bladder is not well defined. Because a normal gall bladder has no squamous epithelium, the source of origin is questionable. Most studies accept that the squamous cells originate from pre-existing metaplastic squamous epithelium [10]. Some others believe that SCC of the gallbladder originates from squamous differentiation of the adenocarcinoma cells, via expression of mixed phenotypes within a single tumor [5]. In our case squamous cell carcinoma originated from malignant transformation of metaplastic squamous epithelium.

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Radical resection is the mainstay treatment of patients with locally invasive squamous cell carcinoma and offers the only chance of cure. The extent of the tumor at the time of diagnosis is the most important parameter in determining survival. The majority of the patients die around six months after diagnosis when radical surgery is not performed [6, 9]. Adjuvant postoperative radiotherapy and chemotherapy may be used, although their results are inconsistent and only palliative [6, 10].

## CONCLUSION

Pure squamous cell carcinoma is an extremely rare entity representing about 3.3% cases. The histogenesis of squamous cell carcinoma has been an enigma for years. Our case suggests that squamous metaplasia followed by dysplasia may ultimately give rise to squamous cell carcinoma of the gallbladder. Radical resection is the mainstay of treatment for locally invasive squamous cell carcinoma and offers a chance of cure.

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