Case Report

CARCINOSARCOMA OF THE GALL BLADDER - A CASE REPORT AND LITERATURE REVIEW

*Kush Kumar Singh, Narayani Joshi and Budhi Prakash Nag
Department of Pathology, Mahatma Gandhi Medical College, Jaipur, Rajasthan 302022
*Author for Correspondence

ABSTRACT
Carcinosarcoma of the gall bladder is an uncommon neoplasm comprises less than one percent of the gall bladder cancers, and characterized by the presence of variable proportion of carcinomatous and sarcomatous element. We report herein a case of 65 year female having cholelithiasis treated by simple cholecystectomy. On histological examination reported as Carcinosarcoma, on immunohistochemistry the carcinomatous areas were positive for cytokeratin and sarcomatous areas were positive for vimentin.

Key Words: Carcinosarcoma, Cholelithiasis, Vimentin, Cytokeratin

INTRODUCTION
Carcinosarcoma of the gall bladder is a rare neoplasm, the diagnosis require the presence of both malignant epithelial and mesenchymal component (Born et al., 1984). The disorders are sometimes called malignant mixed mesodermal tumors and are reported to occur rarely in the uterus, liver, kidney and ovary (Lopez et al., 1985). The prognosis of patient with Carcinosarcoma of the Gall bladder has been reported to be poor (Huget et al., 2005).

CASES
A 65 year female was admitted in the department of surgery in the Mahatma Gandhi Medical College and Hospital with right upper quadrant abdominal pain since 2 months. She had history of vomiting on and off from last one month. Clinical examination disclosed tenderness in the right upper quadrant space. Hematological and biochemical parameters were within normal limits. Ultrasonography revealed Cholelithiasis with the presence of 12-15 stones in the Gall Bladder. Patient underwent Cholecystectomy. The specimen was sent to the department of Pathology. The recieved gall bladder was already cut, stones were removed, was measuring 11X4.5X4 cm in size. Outer surface was grey white with areas of hemorrhage. Almost whole of the lumen of the Gall Bladder was occupied by Polypoid mass measuring 8X3.5X3.5 cms in size, solid, from grey white with hemorrhagic areas (Fig. 1).

Figure 1: The resected specimen of gall bladder showing polypoid mass
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Figure 2: Histological examination of the resected specimen. Microscopic examination showed the tumor was composed of adenocarcinoma and spindle cell sarcomatoid component (HE X 100)

Figure 3: Immunohistochemical staining sarcoma cells were positive for vimentin (x400)
Microscopic Examination showed biphasic pattern and composed of two elements. One was sarcomatous and the other was Adenocarcinoma. The sarcomatous areas showed fascicles of spindle shaped cells with focal carcinomatous areas in the form of scattered glands with considerable nuclear pleomorphism (Fig. 2). Heterologous sarcomatous elements were not seen. On immunohistochemistry the sarcomatous areas were positive for vimentin (Fig. 3). The carcinomatous areas were positive for cytokeratin (Fig. 4).

DISCUSSION
The term carcinosarcoma was first used as descriptive term by Virchow in 1864. The first case of carcinosarcoma in the gall bladder reported by Landsteiner in 1907 was found in museum specimen (Landsteiner et al., 1907). To the best of our knowledge forty cases of carcinosarcoma of gall bladder has been reported by Kabayashi et al., (2009).
Carcinosarcoma are rare and constitute less than 1% of gall bladder cancer. It is characterized by malignancy of both epithelial and mesenchymal component of the same tissue. Its diagnosis requires presence of and intermingling of both histological components (Krishnamurthy et al., 2011). Symptoms of carcinosarcoma of gall bladder are nonspecific (Park et al., 2012). Most patient with carcinosarcoma of gall bladder are females in their sixth or seventh decade and present with abdominal pain and right upper quadrant mass with or without jaundice (Shenber et al., 2002 and Agarwal et al., 2009). Carcinosarcoma of the gall bladder are associated with cholelithiasis. It is being seen that (Roth et al., 1972) association with cholelithiasis in 83% of cases while Vonkuster et al., (1982) reported in 82% of cases of carcinosarcoma. Present case was also associated with cholelithiasis. These tumors are large and polypoid and often fill the gall bladder as in our case. Immunostaining is helpful in making diagnosis. Adenocarcinoma component is positive for cytokeratin and mesenchymalsarcomatous component positive for Vimentin.
Histogensis of carcinosarcoma is unclear, whether it is due to concurrent transformation of epithelial and mesenchymal cell line in the same organ or that the spindle cell component represents sarcomatous metaplasia in a poorly differentiated carcinoma is debatable.
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In summary we report a case of carcinosarcoma of gall bladder. The case is being reported because of its rarity.

REFERENCES


