Sarcomatoid Carcinoma of the Gallbladder with Pure Squamous Cell Carcinoma – A Brief Case Report –

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We report here on a rare case of sarcomatoid carcinoma that contained an epithelial component of squamous cell carcinoma. A 77-year-old woman was found to have a gallbladder mass. The gallbladder showed a diffuse infiltrative wall mass with a polypoid lesion, and the mass measured $8\times7\times3$ cm. There were no gallstones. Histologically, the tumor was composed of two components of squamous cell carcinoma and spindle cell malignancy. The tumor extended to the perimuscular connective tissue and one regional lymph node. The postoperative course was uneventful and the patient was well without tumor recurrence at one and a half months after surgery.

Key Words: Gallbladder; Sarcomatoid carcinoma; Carcinoma, squamous cell

Sarcomatoid carcinoma of the gallbladder is a rare neoplasm.¹ Sixty eight cases of sarcomatoid carcinoma of the gallbladder have been reported in the world literature.² Sarcomatoid carcinoma with an epithelial component of squamous cell carcinoma has been described as having a poor prognosis.²⁻⁴ To the best of our knowledge, three cases of the sarcomatoid carcinoma with pure squamous cell carcinoma have been described in the world literature.⁴⁻⁶ Here we report on an additional case of sarcomatoid carcinoma of the gallbladder with a squamous cell carcinoma component.

CASE REPORT

A 77-year-old woman presented with right upper quadrant discomfort. The laboratory examinations showed slightly increased levels of serum carbohydrate antigen (CA) 19-9 and CA 125. The computed tomography showed an intraluminal pol-

ypoid mass with a thickened wall lesion in the body (Fig. 1). The cystectomy specimen showed an ill-defined infiltrative wall lesion with the solid protruding polypoid mass that measured 8 $\times 7 \times 3$ cm. The polypoid mass lesion was found to be loosely attached to the infiltrative wall mass (Fig. 2). No gallstones were present. Microscopically, the tumor was composed of squamous cell carcinoma and spindle cell malignancy. The squamous cell carcinoma was present in the diffuse infiltrative wall lesion and it consisted of sheets, nests or cord-like arrangement of oval to polygonal cells with keratinization (Fig. 3A). The sarcomatoid component was present in the protruding polypoid mass and it was mainly composed of spindle-shaped tumor cells (Fig. 3B). The sarcomatoid tumor cells showed bizarre nuclei with prominent nucleoli and numerous mitotic figures. No heterologous sarcomatous elements were noted. The tumor extended to the perimuscular connective tissue. There was one metastatic regional lymph node that exhibited carcinoma. On immunohistochemistry, the carcinomatous component was positive for cy-



Fig. 1. The computed tomographic scan shows an intraluminal polyphoid mass (arrow) with irregular wall thickening of the gall-bladder.

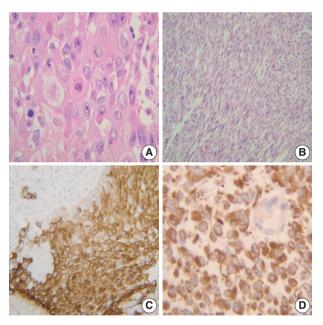


Fig. 3. The tumor cells are composed of well differentiated squamous cell carcinoma (A) and spindle cell malignancy (B). On immunohistochemistry, the carcinomatous and sarcomatoid components are positive for pan-cytokeratin (C) and vimentin (D), respectively.

tokeratin (Fig. 3C) and p63, but it was negative for vimentin. The sarcomatoid component was positive for vimentin (Fig. 3D), focally positive for cytokeratin, and negative for epithelial membrane antigen, smooth muscle actin, desmin and S-100 protein. From these results, the tumor was diagnosed as sarcomatoid car-

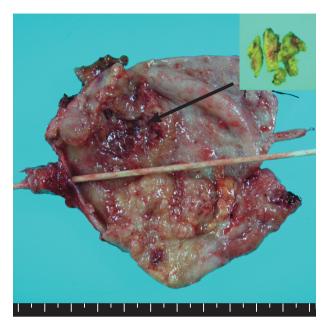


Fig. 2. Gross examination shows a diffuse infiltrative mass with a detached polyphoid mass (right upper corner).

cinoma of the gallbladder. The patient was well without tumor recurrence at one and a half months after surgery.

DISCUSSION

Sarcomatoid carcinoma of the gallbladder is characterized by the presence of both carcinomatous and sarcomatoid components.¹⁻⁷ The least common epithelial component of the sarcomatoid carcinoma of the gallbladder is a squamous cell carcinoma. ^{2,3,7} To the best of our knowledge, there have only been four cases of sarcomatoid carcinoma of the gallbladder with an epithelial component of squamous cell carcinoma, including the present case, in the world wide medical literature. 4-6 Among the four cases, all the patients were females. Cholelithiasis was present in three cases. Among the three cases with available size information, the tumor ranged in size from 8 to 12 cm, with a median size of 12 cm and a mean size of 10.7 cm. The histogenesis of the squamous cell carcinoma of the gallbladder remains unclear. However, it is generally accepted that squamous cell carcinomas arise from the squamous metaplasia.³ The biologic behavior of gallbladder neoplasm that contains squamous cell carcinoma has been described as rapid growth, early metastasis and the formation of a large infiltrative lesion.^{3,4} In our case, the tumor was a large infiltrative mass with one metastatic lymph node that exhibited squamous cell carcinoma. There is no consensus about the proper management because of the limited cases of sarcomatoid carcinoma with a pure squamous cell carcinoma component. Collecting the clinicopathologic data of such cases will be required to improve the clinical and surgical outcome.

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