

Primary Squamous Cell Carcinoma of the Gallbladder: Case Report

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Primary Squamous Cell Carcinoma of the Gallbladder: Case Report

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Key Clinical Message

Gallbladder SCC is a rare clinical entity. Surgery is the main choice of the treatment. There is no consensus about the best adjuvant treatment. The results obtained from this patient might help the role of adjuvant therapies in treating this rare case report.

Abstract

Pure gallbladder squamous cell carcinoma is rare. Adenocarcinoma is the foremost malignant pathology of gallbladder cancer. Simultaneously, squamous cell carcinoma accounts for only 1% of malignant gallbladder tumors. They are often advanced at diagnosis and associated with poor prognosis. The patient was a 37-year-old man diagnosed with poorly differentiated squamous cell carcinoma of the gallbladder. He underwent Cholecystectomy, right hemicolectomy, hepatic wedge resection, and regional lymph node dissection and received six courses of adjuvant chemotherapy with FOLFOX. After two months, liver metastasis was diagnosed, and a chemotherapy regimen consisting of gemcitabine cisplatin pembrolizumab was started. After three courses, stable disease was seen.

Conclusion : Surgery is the main treatment. There is no consensus about the best adjuvant treatment. The results obtained from this patient might help the role of adjuvant therapies in treating this rare case report.

DISCUSSION

Gall bladder cancer is the fifth most malignant tumor of the gastrointestinal tract. One of the important risk factors for GBC is cholelithiasis.(6)

Squamous cell carcinoma of the gallbladder is believed to arise from the basal cell layer of the epithelium. It can also result from squamous cell metaplasia or squamous cell carcinoma differentiation from a pre-existing adenocarcinoma. Chronic irritation from gallstones can lead to differentiation of gallbladder glandular cells into metaplastic squamous epithelial cells, which undergo malignant transformation (7).

GB-SCCs are characterized by a high proliferation rate and local invasiveness. Therefore, patients with advanced-stage GB-SCC are diagnosed with a large tumor and involvement of nearby organs(8).

Gallbladder SCC has the worst prognosis of all histological subtypes, with a median survival time of 7 months and a 5-year survival rate of less than 12%(2). Squamous cell carcinoma of the gallbladder is a malignant tumor characterized by rapid proliferation and early spread to local and distant sites (9).

Due to the lack of a serous layer between the gallbladder and the liver, it can invade the liver parenchyma(10).The most important treatment method is wide margin surgery. However, the reported resectability rate for these tumors was approximately 50%(11).

One of the most prognostic factors is tumor extension. If the tumor is limited to subserosa and adjacent organs, the 5-year survival rate is 70% and 0%, respectively (12).

Ultrasound is usually the first diagnostic modality, but a definitive diagnosis is confirmed by histology(13).CT scan and MRI should be done to rule out metastasis and surgical planning (5).In early detection of gall bladder SCC, surgery is a curative treatment and can improve the prognosis (14).

Simple cholecystectomy is the standard modality for patients with the Tis stage (carcinoma in situ) or T1a (invading mucosa) stage. For patients at the T1b (invading muscular layer) stage or higher, radical resection, including cholecystectomy, limited segmental resection of the liver(segment IVb. V), and regional lymphadenectomy(15), should be considered. Most patients with gallbladder SCC are locally advanced. Treatments such as chemotherapy, radiotherapy, immunotherapy, and conservative care are appropriate (14).

The benefit of adjuvant therapy in patients with high-risk features, including positive nodes and incomplete resection, is reported in many studies. Still, it is unclear which of the treatments, chemotherapy or radiotherapy, is better. The National Comprehensive Cancer Network recommends chemoradiotherapy(16).In this case report, the patient was treated with surgery (cholecystectomy, wedge resection of liver, and right hemicolectomy) and six courses of adjuvant chemotherapy, and then because of liver metastasis, he underwent four courses of gemcitabine cisplatin pembrolizumab chemoimmunotherapy.

ETHICS STATEMENT

We obtained a written statement of informed consent from the patient for the publication of case details and the use of images. The case discussed in this manuscript does not include patient-identifying information, nor does it report a new study that required IRB approval.

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CONFLICT OF INTEREST STATEMENT

The authors declare no conflicts of interest.

DATA AVAILABILITY STATEMENT

Data can be obtained from the corresponding author upon request.

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