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IMAGE | BILIARY

Pleural Carcinosis of a Cholangiocarcinoma

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CASE REPORT

A 44-year-old man who had undergone major liver resection and pylorus-preserving pancreatoduodenectomy 1 year before because of an extrahepatic cholangiocarcinoma was referred to our department. In early life, the patient had undergone resection of a choledochal cyst with choledochoduodenostomy. Now, the patient presented with a progression of the underlying disease under second-line chemotherapy with oxaliplatin/capecitabin. Computed tomography revealed suspicious pulmonary nodules and pleural carcinosis with malignant pleural effusion (Figure 1). To initiate a molecular-targeted cancer therapy, biopsies of the lung and pleura were obtained by video-assisted thoracoscopic surgery. Intraoperatively, the entire pleura presented pervaded with a brown affection and was covered with white nodules (Figure 2). The histological examination of the obtained biopsies of the pleural and the pulmonary nodules showed desmoplastic stromas with tubular, papillotubular, and cribriform patterns and medium-sized cuboidal to columnar cells, corresponding to metastases of a moderately differentiated cholangiocarcinoma. The immunohistochemistry examination revealed an expression of CK7 and CK19 with a KI-67 proliferation rate of 30% (MIB-1) (Figure 3). Subsequently, the patient was forwarded to initiate a targeted oncological treatment.

Cholangiocarcinomas are the most common biliary tract malignancies with a very unfavorable prognosis.[1] To date, surgical resection is the only curative treatment option. However, up to 50% of patients develop recurrence of the disease within 3 years after a R0 resection.[2] The usual metastatic pattern is observed at intrahepatic sites, the local and distant lymph nodes, and the peritoneum. Pulmonary and pleural metastases are very rare, and this is the first image report of pleural carcinosis originating from

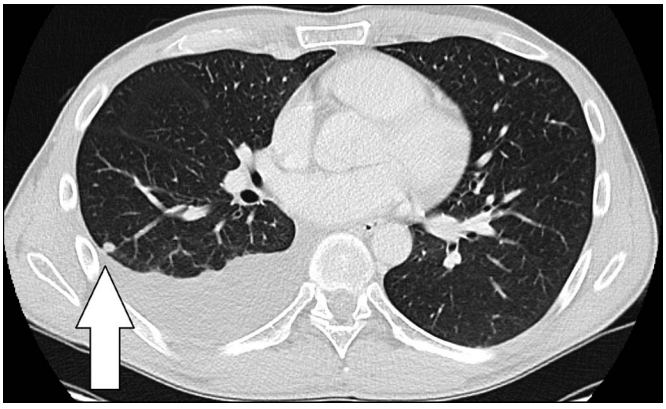

Figure 1. Computed tomography of pulmonary nodules and pleural carcinosis with malignant pleura effusion.

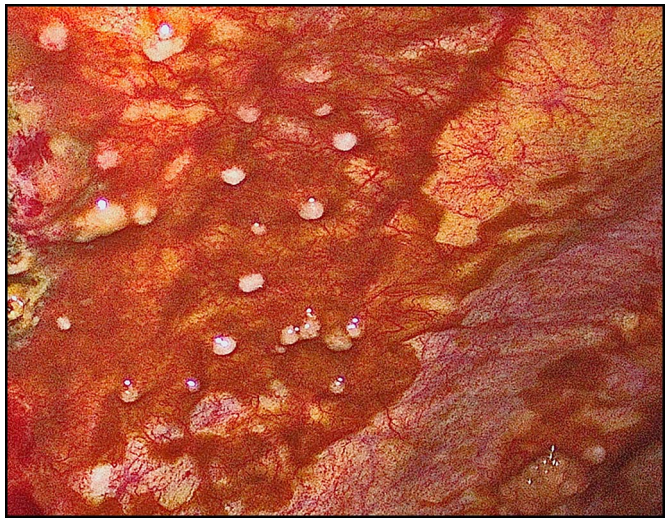

Figure 2. Intraoperative picture of pleural carcinosis showing a brown affection covered with white nodules.

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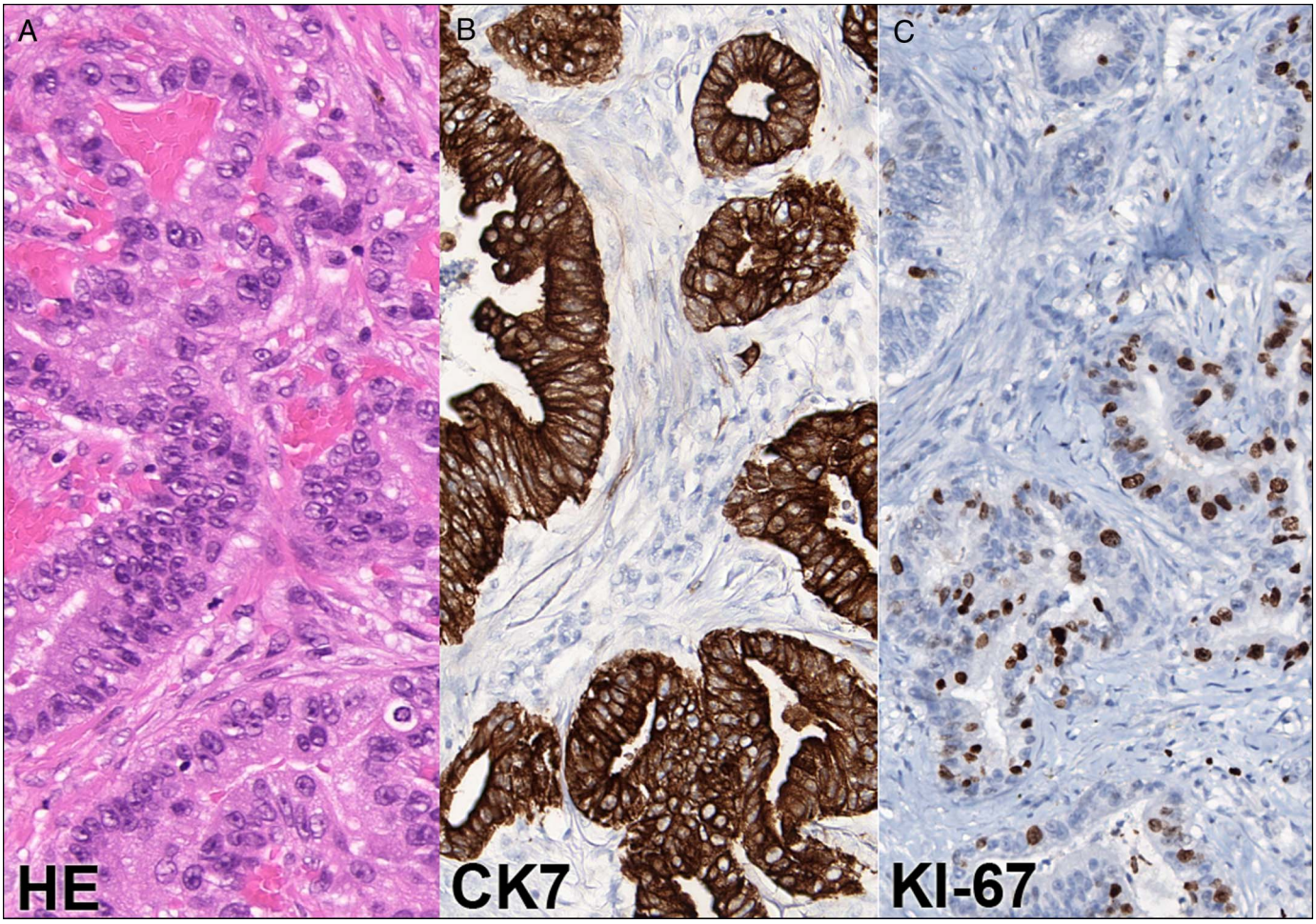

Figure 3. Histological examination of the pleural and the pulmonary nodule biopsies showing desmoplastic stromas with tubular, papillotubular, and cribriform patterns and medium-sized cuboidal to columnar cells, corresponding to metastases of a moderately differentiated cholangiocarcinoma. (A) Hematoxylin and eosin stain. (B) Expression of CK7. (C) KI-67 proliferation rate of 30% (MIB-1).

a cholangiocarcinoma in the literature.[3] Systemic chemotherapy (in combination with radiotherapy) is still used as the mainstream therapy for recurrent disease with median survival rates between 11 and 16 months.[4] Targeted oncological therapies are still seen controversial; however, they may expand the range of treatment options and provide new opportunities in patients with progressed metastatic cholangiocarcinomas.[5]

DISCLOSURES

Author contributions: T. Dziodzio wrote the manuscript, reviewed the literature, and is the article guarantor. M. Jara edited the figures. PV Ritschl proofread the article. F. Roßner performed the histopathological staining and examination. R. Öllinger wrote the manuscript and reviewed the literature. J. Pratschke supervised the writing of the manuscript. J. Neudecker reviewed the manuscript. All authors approved the final version.

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REFERENCES

1. Nakeeb A, Pitt HA, Sohn TA, et al. Cholangiocarcinoma: A spectrum of intrahepatic, perihilar, and distal tumors. *Ann Surg*. 1996;224(4):463–5; discussion 473–75.
2. Groot Koerkamp B, Wiggers JK, Allen PJ, et al. Recurrence rate and pattern of perihilar cholangiocarcinoma after curative intent resection. *J Am Coll Surg*. 2015;221(6):1041–9.
3. Choi SB, Han HJ, Park PJ, et al. Disease recurrence patterns and analysis of clinicopathological prognostic factors for recurrence after resection for distal bile duct cancer. *Am Surg*. 2015;81(3):289–96.
4. Valle J, Wasan H, Palmer DH, et al. Cisplatin plus gemcitabine versus gemcitabine for biliary tract cancer. *N Engl J Med*. 2010;362(14):1273–81.
5. Sahu S, Sun W. Targeted therapy in biliary tract cancers-current limitations and potentials in the future. *J Gastrointest Oncol*. 2017;8(2):324–36.