Case Study

GASTRIC METASTATIS OF RENAL CELL CARCINOMA PRESENTING AS POLYPS

ABSTRACT:

Metastatic tumors of the stomach are very rare, with an incidence of 0, 2%- 0, 7% in the autopsy series. Malignant melanoma, carcinomas of breast, esophagus and lung are the most frequent primary tumor sites. The present case describes a 57-year-old woman who presented to the gastroenterology department with epigastric pain, nausea and vomiting for two months. Examinations revealed gastric metastasis of Renal Cell Carcinoma.

Keywords: Renal Cell Carcinoma; Metastasis; Stomach; Upper Endoscopy; Kidney

INTRODUCTION

The presence of metastasis in the stomach is a rare condition with an incidence of 0, 2%-0, 7% in the autopsy series. Most frequently described primary sites that lead to gastric metastases include skin (malignant melanoma), breast, esophagus and lung (1). Renal Cell Carcinomas originate within the renal cortex and constitute 80 to 85 percent of primary renal neoplasms. Renal Cell Carcinoma can present with a range of sign and symptomsan at presentation, approximately 25 percent of individuals either have distant metastases or advanced locoregional disease (2).

CASE REPORT

A 57-year-old woman was admitted to the hospital complaining of epigastric pain, nausea and vomiting for two months. The patient had a history of right radical nephrectomy for renal cell carcinoma seven years ago. She continued on hemodialysis three times per week because of her atrophic left kidney. The upper endoscopy revealed multiple polypoid masses (2 to 4 cm in diameter) with ulcerations at the corpus of the stomach (Figure 1). Microscopic examination of the biopsies revealed nodular and nested collections of epithelioid clear cells invading lamina propria. Tumor cells showed clear cytoplasm, round to ovoid nuclei with finely granular open chromatin and small, inconspicuous nucleoli. Tumor cells were immunoreactive with antibodies raised against Vimentin and Pancytokeratin. The histomorphologic features and the immunophenotype resulted in a diagnosis of metastatic Renal Cell Carcinoma (Figures 2 and 3). Abdominal and thoracic computed tomography scan revealed multiple metastatic lesions on both lungs. Our patient refused any further treatment procedure and the palliative treatment was performed. The patient died 2 months after the gastric endoscopy.

DISCUSSION

RCC frequently metastasizes to distant organs such as lungs, bones, brain, liver and lymph nodes. However, gastric metastasis from RCC is extremely rare with only 44 cases in the literature reviewed by Herculano et al (3). Gastric metastasis from RCC may be a slow process. The mean period from diagnosis of RCC to diagnosis of metastasis is nearly 7 years (0-23 years) (4). Our patient also had a history of nefrectomy seven years ago. The most common symtoms and signs include gastrointestinal bleeding (melena or hematemesis),

epigastric pain, anemia from occult blood loss, nausea and vomiting. Our patient presented with epigastric pain, nausea and vomiting. Gastric metastasis from RCC may presents as polypoid (a large solitary mass or multiple small polyps) or ulcerated lesions (5). It usually tends to be a single polypoid lesion. In our case, multiple, polypoid masses in the gastric body were noted (Figure 3).

Gastric metastasis is usually associated with advanced disease due to concomitant presence of metastases in other organs. The possibility for gastric metastasis even many years after diagnosis and treatment of RCC, is crucial, particularly in patients with gastrointestinal symptoms. Several therapeutic approaches for gastric metastasis from RCC can be considered however since the survival period is extremely short the optimal treatment remains controversial. Total or subtotal gastrectomy, surgical or endoscopic polypectomy, chemotherapy with systemic or targeted drugs is available (6,7).

CONCLUSION

Gastric metastases of RCC are rare conditions with less than 50 cases described in the literature. Endoscopy can have an important role in the diagnosis particularly in patients with gastrointestinal symptoms. However, the optimal treatment for RCC gastric metastasis remains unclear.

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Figure 1: Multiple, polypoid masses in the corpus of stomach.

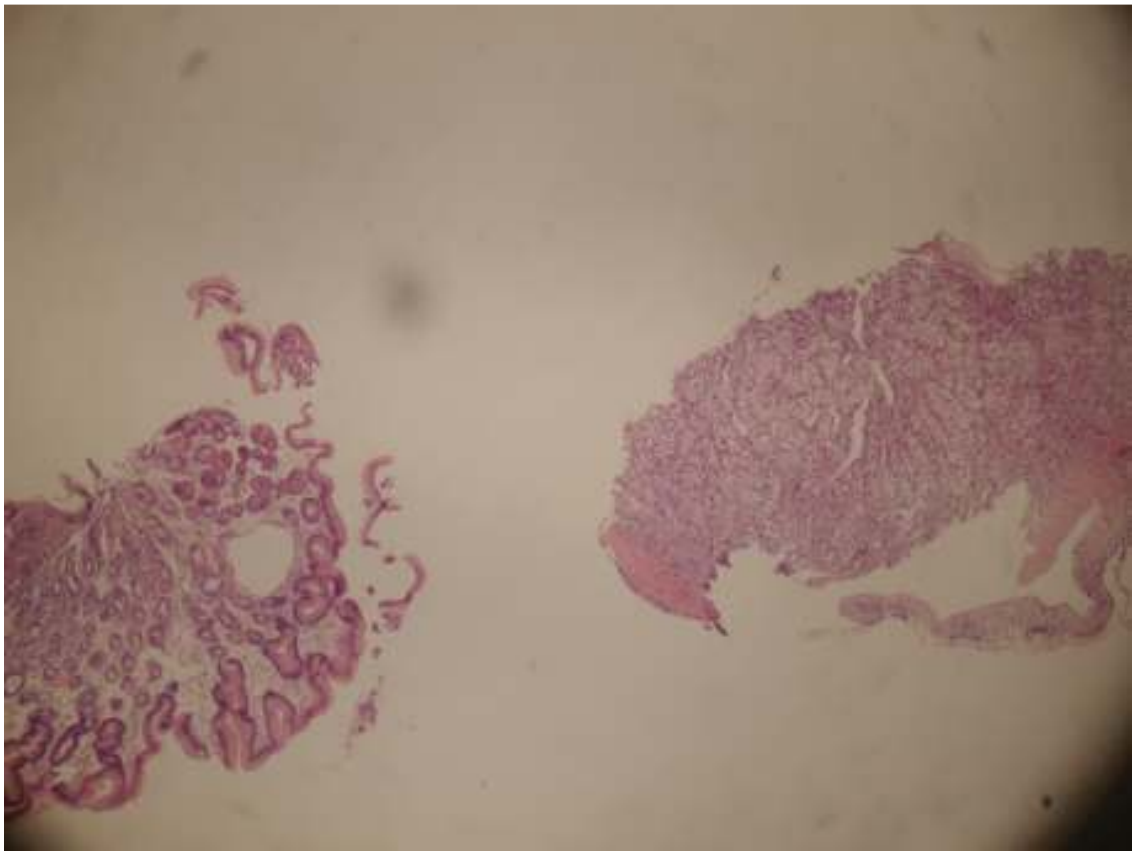

Figure 2: Biopsies from normal gastric mucosa and metastatic mucosa (H&E, 10X)

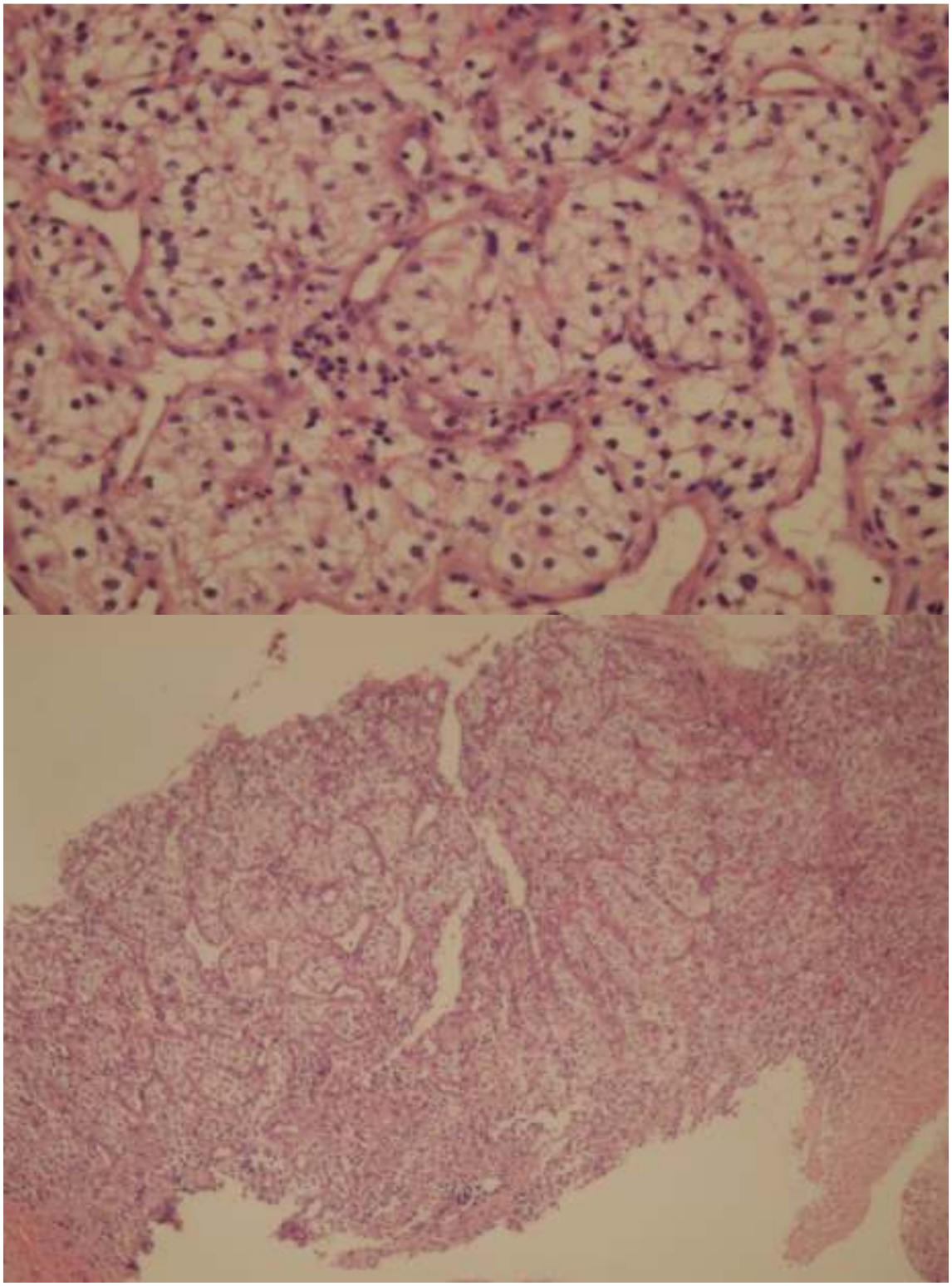

Figure 3: Submucosal nodular collections of epithelioid clear cells, typical histologic characteristics of RCC in gastric mucosa (H&E, original magnification 40X and 100X).