

## Letters to the Editor

### Gastric metastasis from renal cancer six years after nephrectomy

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*Key words: Renal cell carcinoma. Gastric metastasis.*

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Dear Editor,

Renal cell carcinoma is the third most common urogenital neoplasia (1). The lung and bone tissues represent the most frequent metastatic sites of renal cell carcinoma (2). Metastases in the stomach are rare and have been essentially described during autopsies (3). In this paper, we present a case of large metastatic gastric tumor whose origin was a renal cell carcinoma treated years ago.

#### Case report

A 56 year old woman was diagnosed with stage one renal adenocarcinoma 6 years ago. She was treated with right radical nephrectomy and adjuvant chemotherapy. Three years later was diagnosed and treated of brain metastasis located in the frontal lobe, as well as in lung. A year ago, she came to our hospital for upper gastrointestinal bleeding. She presented acceptable general condition and nutritional, blood pressure 120/70 mmHg and normal cardio-respiratory auscultation. The abdomen was soft, non-tender, and no masses or organ enlargements. The analytical study revealed 6.3 g/dl hemoglobin. A thoracic abdominal TAC showed a large mass in the body and antrum stomach of 11 cm diameter without invasion adjacent structures. An upper gastrointestinal endoscopy revealed a large neoplasm from body

to gastric antrum with mamelonated aspect. The patient underwent subtotal gastrectomy. The postoperative course was uneventful. The pathology and immunohistochemical study showed metastasis of kidney carcinoma (Fig. 1).

#### Discussion

Metastatic gastric cancer is uncommon. The most frequent location sites of cancer cells are in the body and gastric fundus, and single tumors predominate against multiple. Although generally gastric metastases account for 0.2-0.7% of stomach tumors, the metastatic tumor from carcinoma renal cells is extremely rare (3) and is an event late. The gastric metastases from renal cell carcinoma are diagnosed years after the primary tumor (4). The histological diagnoses require immunohistochemical analysis for differential diagnostic. We studied AE1/AE3 and vimentin markers, and the most recent CD10 and renal cell carcinoma markers (RCC-Ma). CD10 is a cell surface enzyme expressed in several types of normal cells including the brush border of renal tubular epithelial cells. Positivity for this marker is seen in more than 90% of renal clear carcinomas (5). RCC-Ma is a monoclonal antibody against a normal renal proximal tubule antigen. RCC-Ma expression is relatively specific for primary clear cell in renal carcinoma (6). In our case, the markers confirmed the diagnosis of renal carcinoma. The classic vimentin and AE1/AE3 markers were strongly positive, while CD10 and RCC-Ma showed moderately and weakly positive staining, respectively. The treatment of gastric metastases is controversial. The patients have poor prognosis with frequent extragastric metastases, and the treatment is endoscopic therapy and arterial embolization (7,8). The absence of evidence for other metastases and the presence of large tumor did not support the consideration of therapeutic endoscopy. By contrast, subtotal gastrectomy allowed acceptable clinical and histological outcome. In summary, although the gastric metastasis of renal carcinoma is rare and occurs late in life, should be investigated systematically during management of these patients.

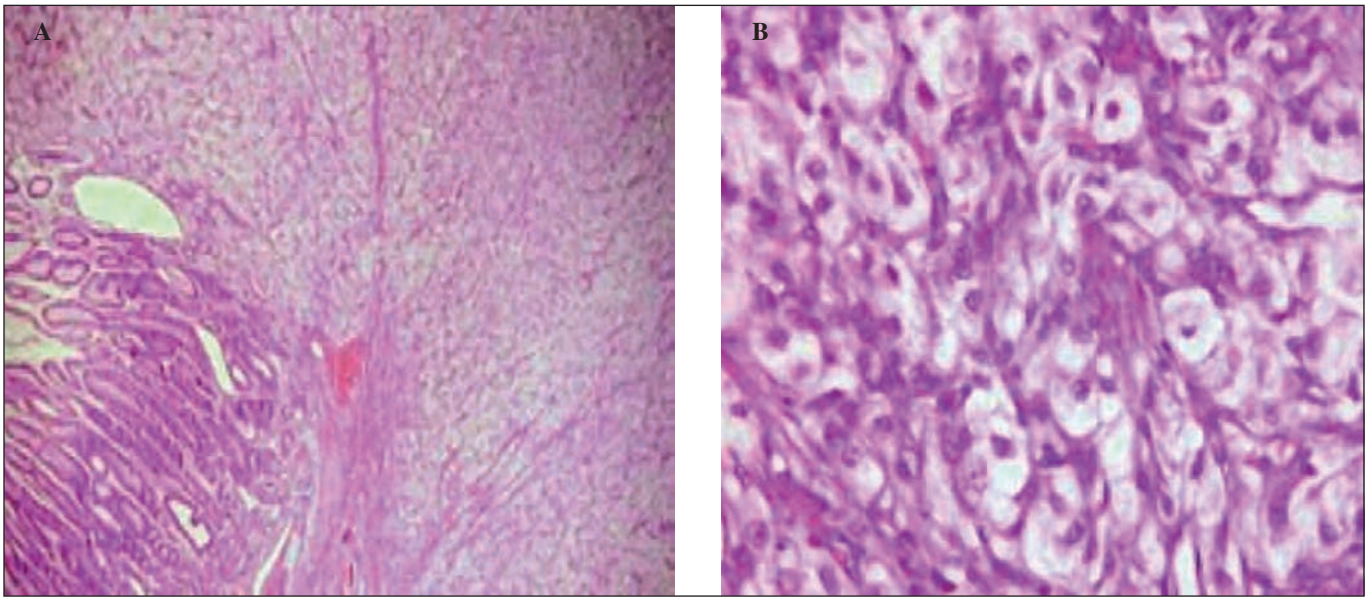


Fig. 1. A. Hematoxylin-eosin staining of the gastric mucosa which is preserved (left) and immediately below the neoplastic proliferation (4x). B. Immunohistochemical studies of vimentin showing strong and diffusely positive staining (20x).

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## References

1. Jermal A, Siegel R, Ward E, Hao Y, Xu J, Murray T, et al. Cancer statistics 2008. *CA Cancer J Clin* 2008;58(2):71-96.
2. Ather MH, Massood N, Siddiqui T. Current management of advanced and metastatic renal cell carcinoma. *Urology Journal* 2010;7(1):1-9.
3. Campoli PM, Ejjima FH, Cardoso DM. Metastasis cancer to the stomach. *Gastric Cancer* 2006;9(1):19-25.
4. Sugasawa H, Ichikura T, Ono S, Ysujimoto H, Hiraki S, Sakamoto N, et al. Isolated gastric metastasis from renal cell carcinoma 19 years after radical nephrectomy. *Int J Clin Oncol* 2010;15(2):196-200.
5. Yamamoto D, Hamada Y, Okazaki S, Kawakami K, Kanzaki S, Yamamoto C, et al. Metastasis gastric tumor from renal cell carcinoma. *Gastric Cancer* 2009;12(3):170-3.
6. Perna AG, Ostler DA, Ivan D, Lazar AJ, Diwan AH, Prieto VG, et al. Renal cell carcinoma marker (RCC-Ma) is specific for cutaneous metastasis of renal cell carcinoma. *J Cutan Pathol* 2007;34(5):381-5.
7. Pollheimer MJ, Hinterleitner TA, Pollheimer VS, Schlemmer A, Langner C. Renal cell carcinoma metastatic to the stomach: single-centre experience and literature review. *BJU Int* 2008;102(3):315-9.
8. Blake MA, Owens A, O'Donoghue DP, McErlean DP. Embolotherapy for massive upper gastrointestinal haemorrhage secondary to metastatic renal cell carcinoma: report of three cases. *Gut* 1995;37(6):835-7.