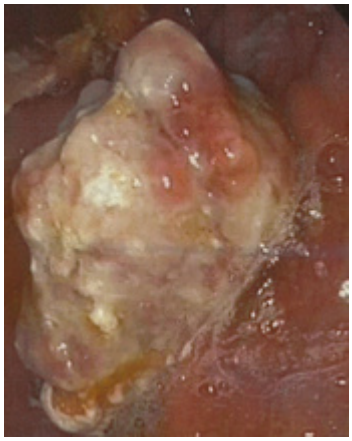
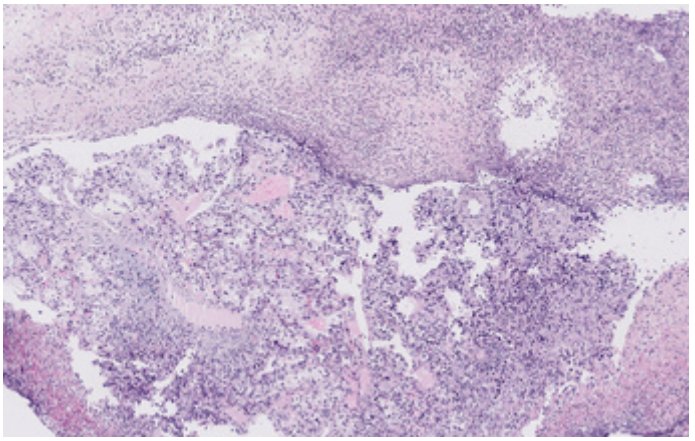
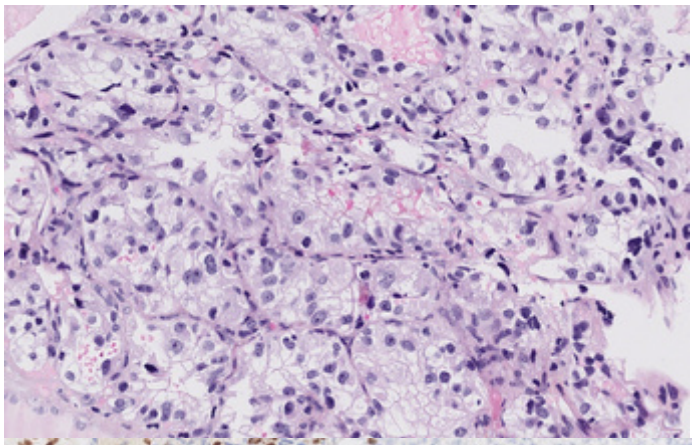
October 2020

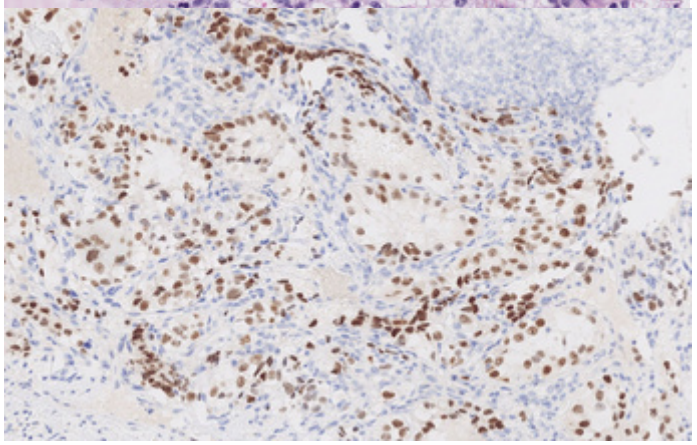
Biopsy of a gastric corpus polyp measuring 2.8 cm in a 82-year old male with anaemia.

What is your diagnosis?









Diagnosis:

Metastatic clear cell renal cell carcinoma.

Comment:

An 82-year old male with chronic renal failure, diabetes type 2, and peripheral artery disease on oral anticoagulants presented with anaemia. Gastroscopy showed diffusely erythematous gastric mucosa and a partially ulcerated pedunculated polyp on the posterior wall of the gastric body measuring 2.8 cm (Panel A).

Microscopically, the polyp was covered by abundant granulation tissue; underneath there were nests of epithelioid cells with abundant clear cytoplasm, round nuclei with prominent nucleoli and intricate richly vascularised stroma (Panel B-C). Tumour cells were diffusely positive for PAX-8 and RCC antigen (Panel D) and negative for CDX-2 immunostaining, consistent with the diagnosis of metastatic clear cell renal cell carcinoma (RCC). A thorough review of the patient's medical history revealed the patient underwent right total nephrectomy 6 years prior due to clear RCC, stage pT1a. Recent abdominal and thoracic CT scans were negative for additional metastatic lesions.

Metastases to the gastrointestinal tract are rare, up to one third occur in the stomach. The most common primaries leading to metastasis in the stomach are carcinoma of the breast, lung and oesophagus, followed by melanoma, pancreatic cancer and RCC. Clear cell RCC is known to have one of the longest intervals between primary diagnosis and metastatic disease and gastric metastasis can be the first presentation of RCC. Gastrointestinal tract metastases are present in 0.2 % of RCC. They are typically single, located in the gastric body or fundus, macroscopically polypoid or ulcerated. If symptomatic, the most common presentation is gastric bleeding with subsequent anaemia. Differential diagnosis includes gastric xanthoma and in the case of ulceration and extensive granulation tissue formation, hyperplastic polyp.

Treatment options for bleeding lesions include embolization, intratumoral epinephrine injection and surgical resection. The prognosis of patients with metastatic RCC is poor.

For further reading:

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- Rita H, Isabel A, Iolanda C, et al. Treatment of gastric metastases from renal cell carcinoma with endoscopic therapy. Clin J Gastroenterol. 2014; 7(2): 148–154.
- Gilg MM, Gröchenig HP, Schlemmer A, et al. Secondary tumors of the GI tract: origin, histology, and endoscopic findings. Gastrointest Endosc. 2018; 88(1): 151-158.

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