

Introduction

Ureteral obstruction can occur due to metastases in patients with pelvic malignancy. However, its occurrence in non-pelvic malignancies, e.g., gastric cancer, is very rare and has a poor prognosis.

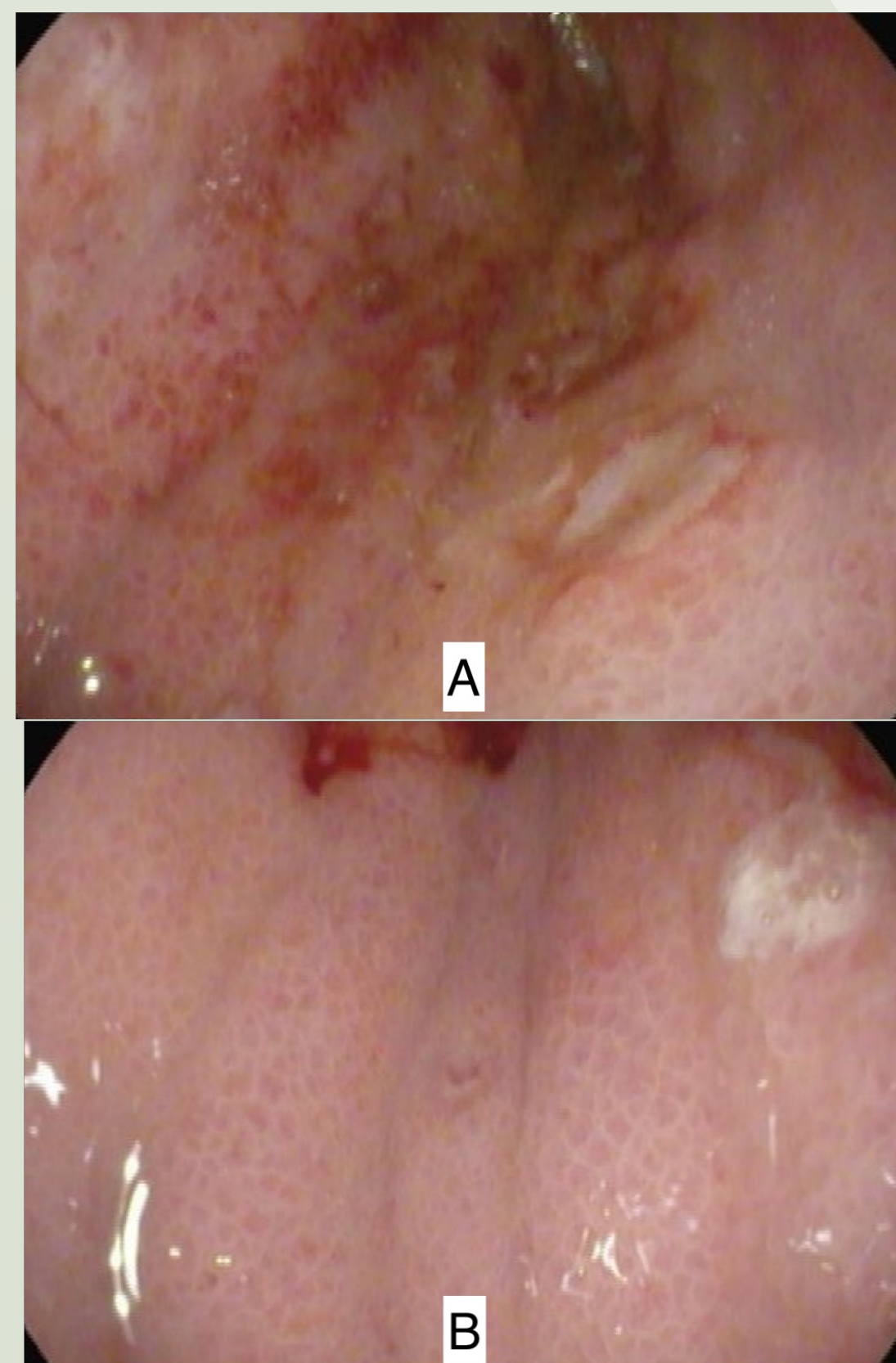


Figure 2. A, B: thickened, edematous gastric mucosal folds, with a waffle-like appearance, that did not flatten with insufflation consistent with linitis plastica.

Case presentation

A 58-year-old female patient presented with **bilateral flank pain and anuria**; she also reported weight loss of 10 kgs. Blood tests showed **creatinine of 656.96 umol/L** (normal range 52.2 - 91.9) and urea of 16.9 mmol/L. Her baseline creatinine was normal. CT of the abdomen with contrast was notable for **bilateral hydronephrosis with no renal or ureteric stones**, and diffuse thickening of the stomach wall with omental nodules and ascites. She underwent bilateral double J-stent placement (Figure 1), and subsequently, her kidney function improved.

EGD (Figure 2 A,B) showed characteristic **waffle-like appearance consistent with linitis plastica**. Histopathology revealed poorly differentiated adenocarcinoma. Furthermore, PET scan showed metastatic lymph nodes above and below the diaphragm with peritoneal involvement. The patient was started on chemotherapy regimen and Nivolumab. A follow-up abdominal CT scan after she received five cycles of chemotherapy showed moderate tumor regression.

Discussion

Different mechanisms for ureteral obstruction in gastric cancer have been described as follow:

- Direct extension of the primary tumor, peritoneal deposits, or lymph nodes to the ureters.
- Retroperitoneal fibrosis as reaction to the malignant cells
- Distant metastases to the ureter from the primary gastric tumor.

In our patient, the most likely etiology of the ureteral obstruction is an extension of the peritoneal metastases to the ureter.

In **conclusion**, Our case provides an example of an unusual clinical presentation of gastric cancer



Figure 1: CT image demonstrating the thickened ureters (blue arrows) mainly on the right side with the double J-stents seen inside their lumen

Contact

Khaled Elfert, MD, MRCP SBH Health System, New York, NY, USA
Email: Kh.elfert90@gmail.com