CLINICAL QUIZ

Left Abdominal Mass. What could it be?

HAYATI F^{1,3}, AZIZAN N², CHONG TH³, NIK AMIN S¹, ZAINAL ABIDIN ZA⁴

¹Department of Surgery, ²Department of Pathobiology and Medical Diagnostic, Faculty of Medicine and Health Sciences, Universiti Malaysia Sabah, Sabah, Malaysia.

³Department of Surgery, Queen Elizabeth Hospital, Kota Kinabalu, Sabah, Malaysia.

⁴Department of General Surgery, Surgical Sciences Cluster, Faculty of Medicine, Universiti Teknologi MARA, Sungai Buloh, Malaysia



Figure 1: Contrasted computed tomography showing left huge homogenous and regular retroperitoneal lesion with peripheral enhancement on axial view

Address for correspondence and reprint requests: Firdaus Hayati. Department of Surgery, Faculty of Medicine and Health Sciences, Universiti Malaysia Sabah, Kota Kinabalu, Sabah, Malaysia. Tel: +088-320000 ext. 611029 E-mail: firdaushayati@gmail.com



Figure 2: Contrasted computed tomography showing left huge homogenous lesion with peripheral enhancement on coronal view occupying the whole left side of the abdomen

QUESTION

A healthy 63-year-old male, presented to the Emergency Department with a complaint of left lumbar colicky pain for 4 days. It was associated with no bowel output for 3 days and abdominal distension for 2 days. He otherwise denied vomiting, fever, and constitutional symptoms. He has never experienced these symptoms before. Clinically, he was pink and not cachexic. He was tachycardic with a heart rate of 105 beats per minute. His abdomen was grossly distended and tender at left lumber region. Left kidney was slightly ballotable but limited due to pain. Biochemically, his renal function was deranged with a creatinine of 157.8 mol/L (eGFR of 41 ml/min/1.73m²). He had a total white cell count of 24 (unit). Microscopic examination of the urine showed 5+ erythrocyte. Spot the radiological diagnosis and briefly how to manage?

ANSWER

A contrasted computed tomography scan of the abdomen showed a gross left hydronephrosis and proximal hydroureter secondary to a proximal ureteric stone. The cortex is markedly thinned out with perinephric fat streakiness. Interestingly enough there was no bowel pathology seen on the scan or any pneumoperitoneum detected. Provisional diagnosis was left sided pyelonephritis with chronic obstructive uropathy secondary to proximal ureteric calculi. Management of this condition is

urgent decompression of the collecting system via a nephrostomy tube insertion. Due to the thinned out cortex, a subsequent functional scan of the kidney needs to be performed to ascertain the renal function. A choice of diethylene triamine pentaacetic acid (DTPA) scan will be ideal. Once function of the kidney has been determined, in cases of a non-functioning kidney, a nephrectomy is an option for treatment as it will reduce the incidence of infection and pain. If the kidney is salvageable, the source of obstruction should be treated via endourologic means (flexible ureteroscopy or percutaneous nephrolithotomy) or open-laparoscopic ureterolithotomy.