

chest signs. The complications of delayed or missed diagnosis may be catastrophic.

Laparoscopic repair is not only feasible but should be the surgical technique of choice in the repair of this rare anomaly. An extreme 'head up' position is advisable for optimal visualization of the defect and

the use of an automatic anchoring device is recommended to fix the mesh to the posterior edge of the defect in a tension-free manner. **BJHM**

Brusciano L, Izzo G, Maffettone V et al (2003) Laparoscopic treatment of Bochdalek hernia

without the use of a mesh. *Surg Endosc* 17(9): 1497–8

Newman BM, Afshani E, Karp MP, Jewett Jr TC, Cooney DR (1986) Presentation of congenital diaphragmatic hernia past the neonatal period. *Arch Surg* 121(7): 813–16

Taskin M, Zengin K, Unal E, Eren D, Korman U (2002) Laparoscopic repair of congenital diaphragmatic hernias. *Surg Endosc* 16(5): 869

IMAGES IN MEDICINE

Unusual presentation of renal calculous disease

A 79-year-old woman was transferred to the authors' institution with resolving urosepsis and acute-on-chronic renal failure after two related intensive care unit admissions during the previous 3-month in-hospital stay elsewhere. She had a medical history of hypertension, chronic obstructive pulmonary disease and limited mobility as a result of osteoarthritis.

Contrast-enhanced computed tomography imaging showed a scarred, atrophic left kidney with a thick-walled collection (7 x 4.5 cm) intimately related to the upper pole of this kidney (Figures 1 and 2) and tracking inferiorly along the left psoas muscle into the pelvis. Several calcified foci were noted within this collection and foci of fat were identified within the left kidney. Also present was a large left ureteric stone, extending for 4 cm distal to the pelvic brim, causing hydroureter and hydronephrosis. The appearances were suggestive of xanthogranulomatous pyelonephritis with psoas abscess formation. There was no clinical or radiological suspicion of a neoplasm.

Owing to her comorbidities and recent intensive care unit admissions, it was decided to continue the patient on oral ciproxin, to refrain from intervention and

to reassess her on an outpatient basis. Three months later, she was clinically stable on continued oral ciproxin.

Xanthogranulomatous pyelonephritis is an unusual manifestation of chronic pyelonephritis, typically predisposed to by urinary calculi, collecting system obstruction

Figure 1. Sagittal reconstruction of contrast-enhanced computed tomography scan of the abdomen, showing abscess collection related to upper pole of hydronephrotic left kidney (long arrow), psoas abscess (short arrow) and obstructing stones in a dilated left ureter (arrowhead).



and suppuration (Korkes et al, 2008). Middle-aged women appear to be most frequently affected. Definitive diagnosis is histological, but computed tomography is the best imaging tool for preoperative presumptive diagnosis.

Treatment has traditionally been open nephrectomy but variations ranging from laparoscopic nephrectomy (Kapoor et al, 2006) to partial, kidney-sparing nephrectomy for focal disease have been described. Increasingly recognized is the success of conservative treatment with antibiotics, particularly for focal disease. **BJHM**

Kapoor R, Vijian V, Singh K et al (2006) Is laparoscopic nephrectomy the preferred approach in xanthogranulomatous pyelonephritis? *Urology* 68(5): 952–5

Korkes F, Favoretto RL, Bróglia M, Silva CA, Castro MG, Perez MD (2008) Xanthogranulomatous pyelonephritis: clinical experience with 41 cases. *Urology* 71(2): 178–80

Figure 2. Coronal reconstruction of contrast-enhanced computed tomography scan of abdomen, showing hydronephrotic left kidney with focus of fat in it (long arrow). Also demonstrated is extensive psoas inflammation extending into pelvis (short arrow).



Dr Naomi Campbell is Specialist Registrar in Radiology, **Dr Sarah Barrett** is Specialist Registrar in Radiology, **Dr Helen Stunell** is Specialist Registrar in Radiology and **Dr William C Torreggiani** is Consultant Radiologist in the Department of Radiology, Adelaide and Meath Hospitals incorporating the National Children's Hospital, Tallaght, Dublin 24, Ireland

Correspondence to: Dr N Campbell