Breasts. *Am J Roentgenol* . 2003 Jul;181(1):177–82. http://dx.doi.org/10.2214/ajr.181.1.1810177
11. Corsetti V, Ferrari A, Ghirardi M, Bergonzini R, Bellarosa S, Angelini O, et al. Role of ultrasonography in detecting mammographically occult breast carcinoma in women with dense breasts. *Radiol Med*. 2006 Apr;111(3):440–8. http://dx.doi.org/10.1007/s11547-006-0040-5
12. Berg WA. Combined Screening With Ultrasound and Mammography vs Mammography Alone in Women at Elevated Risk of Breast Cancer. *JAMA* . 2008 May 14;299(18):2151. http://dx.doi.org/10.1001/jama.299.18.2151
13. Secretan BL, Ph D, Scoccianti C, Ph D, Loomis D, Ph D. Spe ci a l Report Breast-Cancer Screening - Viewpoint of the IARC Working Group. 2014;1–6.
14. Berg WA, Zhang Z, Lehrer D, Jong RA, Pisano ED, Barr RG, et al. Detection of breast cancer with addition of annual screening ultrasound or a single screening MRI to mammography in women with elevated breast cancer risk. *JAMA* . 2012 Apr 4;307(13):1394–404. http://dx.doi.org/10.1001/jama.2012.388
15. Stoutjesdijk MJ, Boetes C, Jager GJ, Beex L, Bult P, Hendriks JH, et al. Magnetic resonance imaging and mammography in women with a hereditary risk of breast cancer. *J Natl Cancer Inst* [Internet]. 2001 Jul;93(14):1095–102. http://dx.doi.org/10.1093/jnci/93.14.1095
16. Kriege M, Brekelmans CTM, Boetes C, Besnard PE, Zonderland HM, Obdeijn IM, et al. Efficacy of MRI and mammography for breast-cancer screening in women with a familial or genetic predisposition. *N Engl J Med* . 2004 Jul 29;351(5):427–37. http://dx.doi.org/10.1056/NEJMoa031759
17. Taneja C, Edelsberg J, Weycker D, Guo A, Oster G, Weinreb J. Cost effectiveness of breast cancer screening with contrast-enhanced MRI in high-risk women. *J Am Coll Radiol* . 2009 March;6(3):171–9. http://dx.doi.org/10.1016/j.jacr.2008.10.003
18. Screening women at higher risk. Available from: http://www.cancerscreening.nhs.uk/breastscreen/higher-risk.html
19. Saslow D, Boetes C, Burke W, Harms S, Leach MO, Lehman CD, et al. American Cancer Society Guidelines for Breast Screening with MRI as an Adjunct to Mammography. *CA Cancer J Clin* . 2007 Mar;57(2):75–89. http://dx.doi.org/10.3322/canjclin.57.2.75

IMAGES IN SURGERY

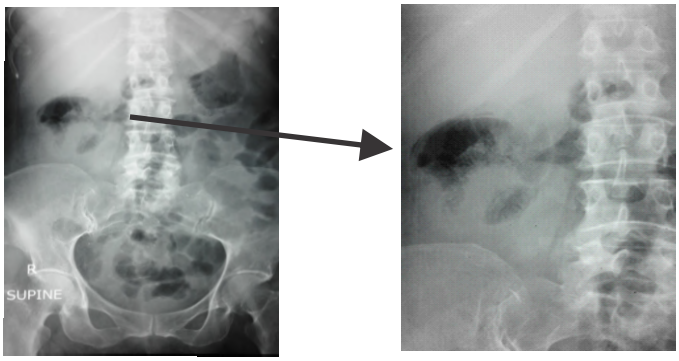
I.H.D.S. Pradeep, M.V.I. De Silva, R.D. Yapa
Surgical Unit, District General Hospital Negombo, Sri Lanka

Case:

A 62 year old female with uncontrolled diabetes mellitus presented with a history of acute onset right sided flank pain, fever with chills and rigors for a duration of 1 day. On examination, she had significant right sided renal angle tenderness with gaseous distention of the abdomen. On investigation, she was found to have neutrophil leukocytosis (WBC: 22 $\times 10^3/mm^3$ Neutrophils – 88%), and urinalysis revealed field full pus cells per high power field on microscopy. Ultrasonography revealed highly echogenic areas within the right kidney with a perinephric fluid collection in the right paracolic gutter. An X-ray KUB was performed and is shown below.

1. What is the radiological abnormality/clinical diagnosis shown?

2. What are the principles of management of a patient with this condition?



Correspondence: I.H.D.S. Pradeep
E-mail: samaniddagoda@gmail.com
DOI: http://doi.org/10.4038/sljs.v34i1.8227
CC BY

Answers on page 18

population based study. *ArchPathol Lab med* 2010;134:1692.
4. Jaoude WA, Lau C, Suguyama G, Duncan A,. Management of Ampullary Carcinoid tumour with pancreaticiduodenectomy. *JSC* 2010;8:4.
5. Relles D, Back J, Witkiewicz A, Yeo CJ. Periampullary and duodenal neoplasms in Neurofibromatosis type I: two cases and updated 20 year review of the literature yielding 76 cases. *J GastrointestSurg* 2010;14:1052-61. http://dx.doi.org/10.1007/s11605-009-1123-0
6. Gilani N, Ramirez FC. Endoscopic resection of an ampullary carcinoid presenting with gastro intestinal bleeding : A case report and review of literature. *World L Gastroenterol* 2007;13:168-70.

Key Point:

- It should be emphasized that peri-ampullary or pancreatic neoplasm should be ruled out as an aetiological factor in those over 40 years presenting with acute pancreatitis for the first time, especially with no other recognizable causes.

Answers to images in surgery (from page 14)

1. Air within the renal parenchyma (clinical diagnosis: emphysematous pyelonephritis in a low lying right kidney).

2. Emphysematous pyelonephritis (EPN) is a severe form of necrotizing infection of the renal parenchyma causing gas formation within the collecting system, renal parenchyma, and/or the peri-renal tissues. It is commonly seen in women with poorly controlled diabetes mellitus. Management consists of conservative medical treatment and/or surgical management.

Medical management:
- Prompt fluid resuscitation to maintain adequate hydration.
- Empirical broad spectrum systemic antibiotics (intravenous ampicillin, gentamicin, carbepenam and metronidazole until culture sensitivities are available; vancomycin is used in patients with penicillin allergy).
- In obstructive uropathy relief of obstruction with percutaneous drainage or stent placement should be attempted. Any drainable infected collection should be drained percutaneously.
- Optimization of diabetic control.

Surgical management is indicated in the following situations:
- Failing medical management with clinical deterioration; nephrectomy is indicated.
- When percutaneous drainage of septic collections within the retroperitoneum is not available.
- When percutaneous drainage or internal stenting is not available for obstructive uropathy.

References

1. Fatima R, Jha R, Muthukrishnan J, Gude D, Nath V, Shekhar S, Narayan G, Sinha S, Mandal SN, Srinivas Rao B, Ramsubbarayudu B. Emphysematous pyelonephritis: A single center study. *Indian J Nephrol*. 2013 Mar-Apr; 23(2): 119–124. http://dx.doi.org/10.4103/0971-4065.109418
2. Sharma PK, Sharma R, Vijay MK, Tiwari P, Goel A, Kundu AK. Emphysematous pyelonephritis: Our experience with conservative management in 14 cases. *Urol Ann* 2013; 5:157-62. http://dx.doi.org/10.4103/0974-7796.115734