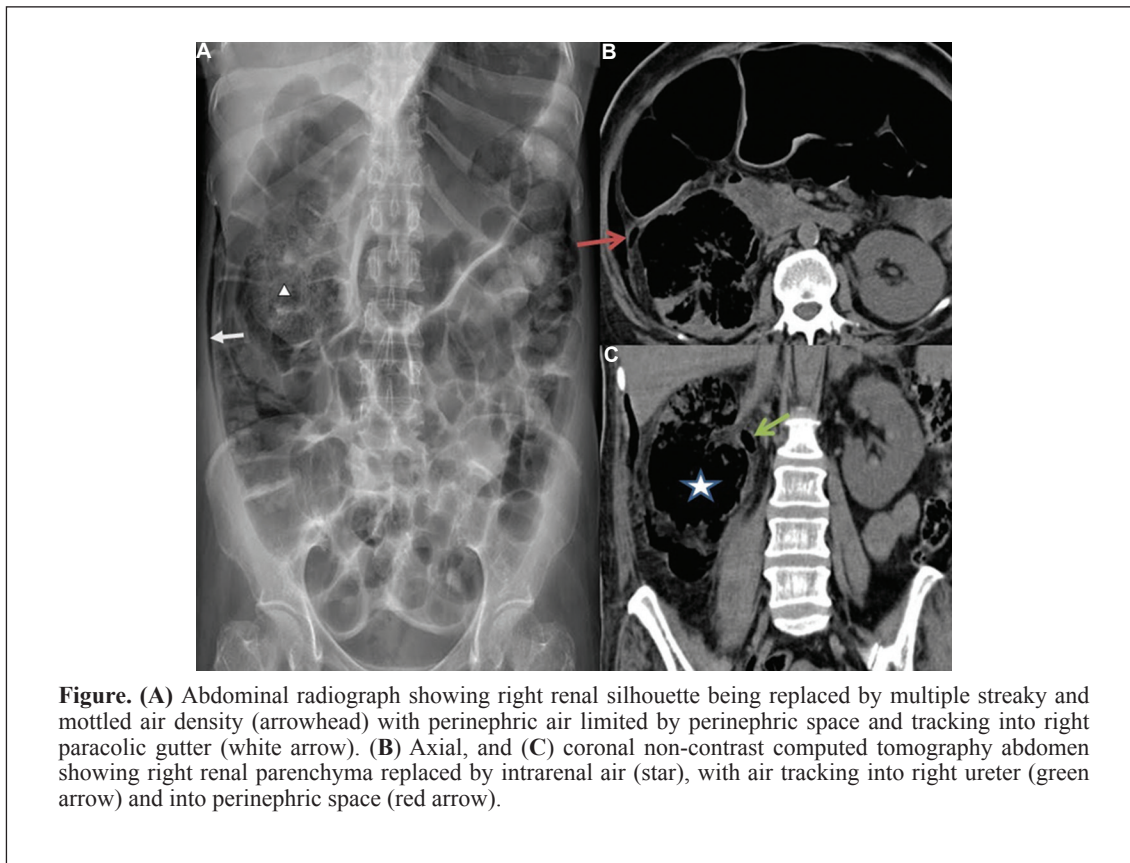




Clinical Image

Emphysematous pyelonephritis: Diagnostic pearls in imaging



A 19 yr old woman[†] presented to the emergency room of the Amrita Institute of Medical Science and Research Centre, Kochi, Kerala, India, in January 2014, with a history of high-grade fever and reduced urine output since the last five days. No history of diabetes mellitus was observed. Total cell count was 22,640/ μ l, with neutrophil predominance of 90 per cent, erythrocyte sedimentation rate (ESR) 60 mm/h and routine urine testing showed plenty of pus cells. Abdominal radiograph (Figure A) showed

right renal silhouette to be replaced by multiple streaky and mottled air density with perinephric air limited by perinephric space and tracking into the right paracolic gutter. Computed tomography (CT) abdomen plain (Figure B and C) showed >50 per cent of right renal parenchyma replaced by intrarenal air. There was associated air tracking all along the length of the right ureter into the urinary bladder. Perirenal, anterior pararenal and posterior pararenal spaces on the right showed air tracking. There was

[†]Patient's consent obtained to publish clinical information and images.

no evidence of fluid collection. Features suggestive of Grade 3b (Huang-Tseng CT classification) right emphysematous pyelonephritis were also noted. Urine culture and sensitivity showed *Escherichia coli*. She subsequently underwent open drainage with 'double-J' stenting. The patient improved with antibiotics and was discharged. Follow up ultrasound scan done elsewhere after eight weeks, showed no residual air or perinephric collection.

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Conflicts of Interest: None.

Anirudh V. Nair^{1,*} & P.V. Ramachandran²
¹Department of Radiodiagnosis & Interventional Radiology, Kerala Institute of Medical Sciences, Thiruvananthapuram 695 029 & ²Department of Radiodiagnosis & Interventional Radiology, Amrita Institute of Medical Sciences & Research Centre, Kochi 682 041, Kerala, India
**For correspondence:*
dranirudhnair@gmail.com

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