

# Renal Cell Carcinoma in Patients with Chronic Renal Failure

M K Li,\**FAMS, MBBS, FRCS*, D K S Choy,\*\**MBBS*, S K H Yip,\*\*\**FAMS, MBBS, FRCS*

## Abstract

*It has been found that patients suffering from chronic renal failure (CRF) are prone to develop acquired cystic kidney disease, which may subsequently lead to the development of renal cell carcinoma (RCC). We reviewed 250 consecutive cases of RCC diagnosed between January 1990 and June 1998 in our Department and found 19 had associated CRF (7.6%). Their clinical presentation, mode and duration of dialysis, diagnostic evaluations, pathological stage and surgical outcome were reviewed. Sixteen had CRF with chronic glomerulonephritis and 3 with adult polycystic kidney disease. Three patients were on continuous ambulatory peritoneal dialysis (CAPD), 5 were on haemodialysis (HD) and 3 had renal transplant (2 on HD, 1 on CAPD previously). The remaining 8 patients were not on renal replacement therapy at the time of diagnosis. Ten patients were asymptomatic with incidental radiological findings while 9 had specific urological symptoms, most commonly haematuria. Ultrasonography (USG) and computed tomography (CT) scan were the main modalities of imaging employed. Nine out of the 10 asymptomatic patients had suspicious lesions detected incidentally by USG. All had subsequent preoperative CT scans confirming the presence of these lesions. All patients had single focus RCC except for 1 with multi-focal disease involving both kidneys. Sixteen patients had early stage (T1 or T2) and low grade (G1 or G2) RCC. The remaining 3 patients had advanced stage (T3a or T3b) and high grade (G3) tumours. Since half of the patients were asymptomatic, USG may be a useful tool in the outpatient review of patients with CRF and allow early diagnosis and surgical treatment of early stage, low grade tumours and therefore may have better survival.*

*Ann Acad Med Singapore 1999; 28:512-5*

**Key words:** *Renal failure, Acquired cystic disease, Early detection, Renal cell carcinoma*

---

\* Senior Consultant

\*\* Medical Officer

\*\*\* Senior Registrar

Department of Urology

Singapore General Hospital

Address for Reprints: Associate Professor M K Li, Department of Urology, Singapore General Hospital, 1 Hospital Drive, Singapore 169608.

E-mail: [surlink@nus.edu.sg](mailto:surlink@nus.edu.sg)