RESEARCH HIGHLIGHTS

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Autosomal dominant polycystic kidney disease can be associated with lung abnormalities

Autosomal dominant polycystic kidney disease (ADPKD) is responsible for 5–10% of all cases of end-stage renal disease in the US, and is thought to be caused by mutations in two proteins expressed in the immotile primary cilia of renal epithelial cells—polycystin-1 and polycystin-2.

Driscoll et al. report that polycystin-1, mutations of which account for 85% of ADPKD cases, is also expressed in the motile cilia of healthy airway epithelial cells. This observation, together with evidence of bronchiectasis in lung tissue samples from one of five ADPKD autopsies, prompted the authors to retrospectively review chest CT scans obtained from 95 patients with ADPKD at the Barnes-Jewish Hospital in Saint Louis, MO, USA, during the period January 2000 to July 2006. A significantly higher rate of 'radiographic' bronchiectasis was observed among these scans than among 95 CT scans obtained from a control group of patients with non-ADPKD-related chronic kidney disease or end-stage renal disease (37% vs 13%, P=0.0002), although cases were generally mild.

Extrarenal pathological involvement in patients with ADPKD is well known; however, this study is the first to report evidence of lung involvement. Furthermore, the higher-than-expected prevalence of bronchiectasis in the control group suggests that other genetic kidney diseases could perhaps lead to bronchiectasis.

Original article Driscoll JA *et al.* (2008) Autosomal dominant polycystic kidney disease is associated with an increased prevalence of radiographic bronchiectasis. *Chest* **133:** 1181–1188

Faster CKD progression explains higher ESRD incidence among African Americans with HIV

The risk of developing end-stage renal disease (ESRD) is ~50 times greater for HIV-infected African Americans than for HIV-infected whites, although little is known about the effect of race on the incidence of chronic kidney disease (CKD) and its progression to ESRD.

Lucas *et al.* performed a cohort study in 3,332 HIV-infected African Americans and 927

HIV-infected whites who had received primarv care at the Johns Hopkins Medical Center in Baltimore, MD, USA, since 1990, After a mean follow-up period of ~4.5 years, 210 of the 4,185 patients who had no evidence of CKD at enrollment developed the disease. Of the 284 patients who either had pre-existing CKD or developed new-onset CKD, 100 progressed to ESRD: 99 were African Americans and one was white. African Americans were only 1.9 (95% CI 1.2-2.8) times more likely than whites to develop CKD, but had a 17.7 (95% CI 2.5-127) times greater risk of developing ESRD than their white counterparts. These data indicate that the higher incidence of ESRD in HIV-infected African Americans than in HIV-infected whites reflects accelerated disease progression more than a greater incidence of CKD.

Given that the incidence of CKD was 40% lower after 2001 than before 1996, probably as a result of improvements in antiretroviral treatment, and that use of an angiotensinconverting-enzyme inhibitor or angiotensin receptor blocker was associated with a 50% reduction in the risk of developing ESRD, HIVinfected African Americans should be considered for routine CKD screening and for early initiation of highly active antiretroviral therapy.

Original article Lucas GM *et al.* (2008) Chronic kidney disease incidence, and progression to end-stage renal disease, in HIV-infected individuals: a tale of two races. *J Infect Dis* **197:** 1548–1557

Mycophenolate mofetil is a less toxic treatment for primary glomerulonephritis

Uncontrolled studies suggest that mycophenolate mofetil (MMF) could reduce steroid exposure and be an effective non-cytotoxic treatment for various glomerulonephritides. Senthil Nayagam and colleagues carried out an open-label pilot study to compare the efficacy of MMF treatment with conventional therapy for the induction of remission in nephrotic patients with idiopathic biopsy-proven membranous nephropathy (MN) or focal segmental glomerulosclerosis (FSGS).

A total of 54 Indian patients (21 with MN and 33 with FSGS) were assessed. Previous use of steroids or immunosuppressants was an exclusion criterion. Nephrotic patients with an estimated glomerular filtration rate <60 ml/min