patients admitted with sepsis, 42.1% and 43.4% were defined as having AKI within 24 h of admission according to the RIFLE and AKIN criteria, respectively. The criteria were equally predictive of crude hospital mortality.

The authors conclude that the AKIN modifications have only a minor effect on the classification of patients with AKI.

Original article Bagshaw SM *et al.* (2008) A comparison of the RIFLE and AKIN criteria for acute kidney injury in critically ill patients. *Nephrol Dial Transplant* **23:** 1569–1574

Use of accelerated venovenous hemofiltration in the intensive care setting

Continuous venovenous renal replacement therapies are routinely used to treat hemodynamically unstable patients in the intensive care setting, but these treatments are expensive, limit patient mobility, and require continuous anticoagulation and constant staffing. To overcome these problems, Gashti *et al*. have developed an alternative approach called accelerated venovenous hemofiltration (AVVH).

AVVH is a convection-based strategy that uses increased blood flow rates (350–400 ml/min) and the administration of replacement fluid in the predilution mode to shorten treatment sessions and eliminate the need for anticoagulation. In addition, frequent bag changes and manual data recording are not required. The authors reviewed data from 100 consecutive hemodynamically unstable patients (89 with acute kidney injury, 11 with end-stage renal disease) who underwent AVVH in an intensive care setting during the period December 2004 to April 2006. Patients received an average of 4.1 treatments over 5.6 days; 86% received the prescribed dose of 36 l of hemofiltration over 9 h. Out of 457 AVVH treatments, filter clotting was observed in 15 (3.3%), and 22 (4.8%) were terminated because of patient instability. The overall survival rate was 53%.

The authors conclude that the short duration of treatment, minimal need for staff monitoring, and adequate volume and solute control of AVVH make this modality a viable alternative to traditional continuous renal replacement therapies.

Original article Gashti CN *et al.* (2008) Accelerated venovenous hemofiltration: early technical and clinical experience. *Am J Kidney Dis* **51:** 804–810

CKD increases risk of acute kidney injury during hospitalization

Chronic kidney disease (CKD) is a reputed risk factor for development of acute kidney injury (AKI) during hospitalization. This concept is based on studies in which baseline kidney function was estimated from serum creatinine concentration upon admission to hospital or intensive care unit; however, whether such serum creatinine levels reflect early-stage AKI or true baseline kidney function is unknown.

Hsu *et al*. compared prehospitalization estimated glomerular filtration rates (eGFRs; estimated by use of the abbreviated Modification of Diet in Renal Disease equation) of 1,764 adult members of the Kaiser Permanente Northern California health-care system who developed dialysis-requiring AKI during hospitalization with those of 600,820 individuals who did not.

Compared with a reference baseline eGFR of ≥60 ml/min/1.73 m^2, a baseline eGFR of 45–59 ml/min/1.73 m^2 was associated with an adjusted odds ratio of in-hospital AKI of 1.66 (95% CI 1.40–1.97). For eGFR values of 15–29 ml/min/1.73 m^2, the adjusted odds ratio for in-hospital AKI was 20.42 (95% CI 17.40–23.96). The presence of diabetes, hypertension, and proteinuria also increased the likelihood of developing in-hospital AKI, with adjusted odds ratios of 1.99 (95% CI 1.78–2.23), 1.55 (95% CI 1.37–1.76) and 2.84 (95% CI 2.52–3.19), respectively.

CKD is the main risk factor for AKI during hospitalization. In this study, the increased risk of AKI associated with even mildly reduced eGFR reinforces the validity of National Kidney Foundation guidelines, in which patients with an eGFR <60 ml/min/1.73 m^2 are classified as having CKD regardless of other factors.

Original article Hsu CY *et al.* (2008) The risk of acute renal failure in patients with chronic kidney disease. *Kidney Int* [doi:10.1038/ki.2008.107]

Pentoxifylline lowers proteinuria in patients with diabetic nephropathy

McCormick *et al.* have analyzed data from randomized controlled trials of the phosphodiesterase inhibitor pentoxifylline as an oral antiproteinuric agent in diabetic kidney disease.