Nature Reviews Nephrology 8, 435 (2012); published online 10 July 2012;

doi:10.1038/nrneph.2012.132;

doi:10.1038/nrneph.2012.133:

doi:10.1038/nrneph.2012.134;

doi:10.1038/nrneph.2012.135

IN BRIEF

CHRONIC KIDNEY DISEASE

Treatment of kidney failure is age dependent

Findings from a community-based cohort study of 1.8 million adults have shown that older patients with kidney failure are less likely than younger patients to receive dialysis or kidney transplantation. Over a median follow up of 4.4 years, adjusted rates of treated kidney failure were consistently higher in younger than in older individuals across categories of kidney function. In patients with low kidney function, patients aged 18–44 years had a >10-fold higher chance of receiving treatment than did patients aged ≥85 years.

Original article Hemmelgarn, B. R. *et al.* Rates of treated and untreated kidney failure in older vs younger adults. *JAMA* **307**, 2507–2515 (2012)

HYPERTENSION

Azilsartan medoxomil for stage 2 systolic hypertension

Azilsartan medoxomil plus chlorthalidone is superior to olmesartan plus hydrochlorothiazide for the treatment of stage 2 systolic hypertension, say researchers. In a triplearm, double-blind study, Cushman et al. randomly allocated 1,071 participants to receive high-dose or low-dose azilsartan medoxomil plus chlorthalidone, or olmesartan medoxomil plus hydrochlorothiazide. Decreases in clinic and ambulatory systolic blood pressures were greater in both azilsartan medoxomil–chlorthalidone groups than in the olmesartan–hydrochlorothiazide group after 12 weeks.

Original article Cushman, W. C. et al. Azilsartan medoxomil plus chlorthalidone reduces blood pressure more effectively than olmesartan plus hydrochlorothiazide in stage 2 systolic hypertension. *Hypertension* doi:10.1161/HYPERTENSIONAHA.111.188284

ACUTE KIDNEY INJURY

FGF-23 levels and risk of adverse outcomes in AKI

High levels of FGF-23 are associated with adverse outcomes in patients with acute kidney injury (AKI), according to researchers. Leaf et al. compared levels of FGF-23 in 30 patients with AKI with levels in 30 controls without AKI. FGF-23 levels were significantly greater in individuals with AKI than in those without and increased levels were significantly associated with the composite end point of death or need for renal replacement therapy.

Original article Leaf, D. E. et al. FGF-23 levels in patients with AKI and risk of adverse outcomes. Clin. J. Am. Soc. Nephrol. doi:10.2215/CJN.00550112

HYPERTENSION

Carvedilol reduces intradialytic hypertension frequency

Targeting endothelial dysfunction with carvedilol improves intradialytic and interdialytic blood pressure and reduces the frequency of intradialytic hypertension in patients on hemodialysis, according to new findings. In a prospective, 12-week study of 25 hemodialysis patients with intradialytic hypertension, Inrig and colleagues found that carvedilol improved flow-mediated vasodilation. Predialysis systolic blood pressure was unchanged by treatment but postdialysis systolic blood pressure and frequency of intradialytic hypertension were reduced.

Original article Inrig, J. K. *et al.* Probing the mechanisms of intradialytic hypertension: a pilot study targeting endothelial cell dysfunction. *Clin. J. Am. Soc. Nephrol.* doi:10.2215/CJN.10010911