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IN BRIEF

CRITICAL CARE

EGDT does not improve outcomes in septic shock

Early goal directed therapy (EGDT) for septic shock does not improve outcomes, and on average, is associated with increased costs, according to the findings of a new randomized controlled trial. Mouncey *et al.* assigned 1,260 patients presenting with early septic shock to receive either EGDT or usual care. They found no difference in the primary outcome of all-cause mortality at 90 days, and no significant differences in secondary outcomes, including health-related quality of life or rates of serious adverse events.

Original article Mouncey, P.R. *et al.* Trial of early, goal-directed resuscitation for septic shock. *N. Engl. J. Med.* doi:10.1056/NEJMoa1500896

EPIDEMIOLOGY

Disparities in access to renal replacement therapy

At least 2.284 million people might have died prematurely in 2010 due to lack of access to renal replacement therapy (RRT), say the authors of a new systematic review. Liyanage and colleagues say that of an estimated 4.902–9.701 million people who needed RRT in 2010, only 2.618 million people received it. The largest treatment gaps were in low-income countries, particularly in Asia and Africa. They estimate that the worldwide use of RRT will more than double to 5.439 million people by 2030.

Original article Liyanage, T. *et al.* Worldwide access to treatment for end-stage kidney disease: a systematic review. *Lancet* doi:10.1016/S0140-6736(14)61601-9

CRITICAL CARE

No benefit of fresh red blood cells over standard-issue cells

New findings, published in the *New England Journal of Medicine*, show that transfusion of fresh red cells does not decrease mortality in critically ill patients, despite the researchers' initial hypothesis that fresh red cells stored for <8 days would be superior to standard-issue red cells. Lacroix *et al.* randomly assigned 1,211 critically ill patients to receive fresh red cells (stored for a mean of 6.1 days) and 1,219 patients to receive standard-issue red cells (stored for a mean of 22.0 days). They found no difference in 90-day mortality or in secondary outcomes, including duration of respiratory, haemodynamic or renal support.

Original article Lacroix, J. *et al.* Age of transfused blood in critically ill adults. *N. Engl. J. Med.* doi:10.1056/NEJMoa1500704

FIBROSIS

TGF- β signalling and renal fibrosis

In vitro studies have shown that TGF- β increases the synthesis of collagen I and fibronectin by matrix-producing interstitial cells, but new findings show that blocking TGF- β signalling in these cells does not reduce renal fibrosis. To investigate the effects of TGF- β on matrix-producing interstitial cells, Neelisetty and coworkers deleted TGF- β type II receptor expression in these cells using two different inducible Cre models. Following unilateral ureteral obstruction or administration of aristolochic acid to induce renal injury, collagen I production was impaired in the conditional knockouts but total tissue fibrosis was unchanged compared to levels in wild-type mice.

Original article Neelisetty, S. *et al.* Renal fibrosis is not reduced by blocking transforming growth factor- β signaling in matrix-producing interstitial cells. *Kidney Int.* doi:10.1038/ki.2015.51