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IN BRIEF

CLINICAL TRIALS

Predictors of timely publication for cardiovascular RCTs

Cardiovascular clinical trials funded by the National Heart, Lung, and Blood Institute (NHLBI) in the USA are published sooner after completion of the study if they have clinical, rather than surrogate, end points, and if they have positive, rather than negative, findings. Gordon *et al.* investigated the time between completion of data collection and publication of results for 244 randomized studies supported by the NHLBI. All trials were completed between 1 January 2000 and 31 December 2011. Only 57% of studies had been published within 30 months of completion, and trials with clinical end points were significantly more likely to be published within this time frame than those with surrogate end points (adjusted publication rate ratio 2.11, 95% CI 1.26–3.53, $P=0.004$). The cost of the trial (up to US\$5 million) was also a predictor of timely publication.

Original article Gordon, D. *et al.* Publication of trials funded by the National Heart, Lung, and Blood Institute. *N. Engl. J. Med.* **369**, 1926–1934 (2013)

CARDIAC RESUSCITATION

Mechanical CPR with defibrillation does not improve outcomes in out-of-hospital cardiac arrest

Mechanical chest compression with cardiac defibrillation does not improve 4 h survival compared with manual cardiopulmonary resuscitation (CPR) in patients with out-of-hospital cardiac arrest. The randomized LINC trial was conducted in the Netherlands, Sweden, and the UK, and involved 2,589 patients who underwent CPR with the mechanical LUCAS® Chest Compression System (Jolife AB, Sweden / Physio-Control, Inc., USA) or manual CPR as directed by European guidelines. Survival at 4 h after cardiac arrest was similar in the mechanical and manual CPR groups (23.6% and 23.7%, respectively). No differences were noted in survival at 1 or 6 months between the two interventions. Neurological outcome among survivors was good in both groups (cerebral performance category score 1 or 2 in 99% of patients in the mechanical CPR group, and 94% in the manual CPR group).

Original article Rubertsson, S. *et al.* Mechanical chest compressions and simultaneous defibrillation vs conventional cardiopulmonary resuscitation in out-of-hospital cardiac arrest: the LINC randomized trial. *JAMA* doi:10.1001/jama.2013.282538

LIPIDS

Novel method of estimating LDL-cholesterol level

The Friedewald equation, which is commonly used to estimate LDL-cholesterol level, assumes a fixed ratio of five between triglycerides and VLDL cholesterol (TG:VLDL-C). Martin *et al.* have developed and validated a novel method of LDL-cholesterol level estimation, using a variable TG:VLDL-C ratio derived from data obtained from 1,350,908 US adults, adolescents, and children. The model improved the accuracy of LDL-cholesterol level estimation, particularly in classifying LDL-cholesterol concentration <70 mg/dl among individuals with an elevated TG level. If externally validated, Martin *et al.* believe that “implementation of these findings into clinical practice would be straightforward and at virtually no cost”.

Original article Martin, S. S. *et al.* Comparison of a novel method vs the Friedewald equation for estimating low-density lipoprotein cholesterol levels from the standard lipid profile. *JAMA* **310**, 2061–2068