Top Ten Articles in Hospital Medicine 2016

Nestor G. Tarragona, MD, FHM[a,b,*], Andres Solorza, MD[a,b]

KEYWORDS

• Evidence-based medicine • Community-acquired pneumonia (CAP)
• Acute coronary syndrome • Venous thromboembolism (VTE) • Stroke
• Physician workload • Medical error • Clostridium difficile

HOSPITAL MEDICINE CLINICS CHECKLIST

1. Elderly patients with acute coronary syndrome benefit from diagnostic angiography and invasive strategy if they are sufficiently healthy.
2. Direct oral anticoagulants can be considered in patients with cancer-associated venous thromboembolism.
3. Platelet transfusion increases the risk of death or dependence in patients who have an acute intracerebral hemorrhage while taking antiplatelet therapy.
4. Five days of treatment may be enough for community-acquired pneumonia.
5. There were 251,454 estimated deaths from medical errors in the United States in 2013.
6. Higher workload among attending physicians is associated with lower teaching efficiency and increased risks to patient safety.
7. Endovascular thrombectomy reduced disability level and improved functional independence at 90 days compared with usual care.
8. An age-adjusted cutoff for D dimer should be used with the Wells score to exclude the diagnosis of pulmonary embolism.
9. Vancomycin is better than metronidazole and fidaxomicin reduces recurrences in patients with *Clostridium difficile*.
10. The ABC (age, biomarkers, clinical history) stroke risk score performs better than CHA2DS2-Vasc score in patients with atrial fibrillation.

Disclosure: The authors have nothing to disclose.

[a] Department of Hospital Medicine, Lahey Hospital and Medical Center, 41 Burlington Mall Road, Burlington, MA 01803, USA; [b] Tufts University School of Medicine, 145 Harrison Avenue, Boston, MA 02111, USA
* Corresponding author.
E-mail address: Nestor.Tarragona@lahey.org

Hosp Med Clin ■ (2016) ■–■
http://dx.doi.org/10.1016/j.ehmc.2016.11.001

This article discusses publications from the highest impact journals based on the authors' perception of their clinical usefulness and the potential to change or confirm practice within hospital medicine.

Do elderly patients with non–ST-elevation myocardial infarction (NSTEMI) or unstable angina benefit from an invasive strategy?

Tegn N, Abdelnoor M, Aaberge L, et al. Invasive versus conservative strategy in patients aged 80 years or older with non-ST-elevation myocardial infarction or unstable angina pectoris (After Eighty study): an open-label randomised controlled trial. Lancet 2016;387(10023):1057–65.

BACKGROUND

Cardiovascular mortality has significantly declined, mostly because of aggressive intervention and medical management of coronary artery disease. Most of the evidence is derived from studies in which the elderly population is underrepresented. However, hospitalists frequently encounter elderly patients with acute coronary syndrome. The elderly have different physiology, are more frail, tend to have poorer functional status, and are more susceptible to complications associated with procedures.[1]

The After Eighty trial was designed to establish whether patients aged 80 years or older with acute coronary syndrome would benefit from an early invasive strategy with immediate assessment for percutaneous coronary intervention, coronary artery bypass grafting, or optimum medical treatment compared with a conservative strategy.

DESIGN OF THE STUDY

Open-label, randomized controlled, multicenter trial of 449 patients with NSTEMI or unstable angina admitted to 16 hospitals in Norway.

The primary end point was a composite of myocardial infarction, need for urgent revascularization, stroke, and death from any cause.

Exclusion criteria included continuing ischemic symptoms, cardiogenic shock, short life expectancy (<12 months) because of serious comorbidity, and severe mental disorder.

RESULTS

During follow-up, the primary end point occurred in 93 (41%) patients in the invasive group and in 140 (61%) patients in the conservative group (hazard ratio, 0.53; 95% confidence interval [CI], 0.41–0.69; $P = .0001$) (Table 1). The invasive group had 4

Table 1
Results of primary end point and complications (bleeding)

	Invasive Strategy Group (n = 229)	Conservative Strategy Group (n = 228)	Rate Ratio	*P* Value
Composite end point	93 (41%)	140 (61%)	0.48 (0.37–0.63)	.0001
Major bleeding	4 (2%)	4 (2%)	NA	NA
Minor bleeding	23 (10%)	16 (7%)	NA	NA

Abbreviation: NA, not available.