Same-day transfer for the invasive strategy of patients with non-ST-segment elevation acute coronary syndrome admitted to spoke hospitals: Data from the Emilia-Romagna Regional Network

Campo G, Menozzi M, Guastaroba P, Vignali L, Belotti LM, Casella G, **Berti E**, Solinas E, Guiducci V, Biscaglia S, Pavasini R, De Palma R, Manari A.

Abstract

BACKGROUND:

The service strategy (same-day transfer between spoke hospital and hub centre with catheterisation laboratory (cath-lab) facility to perform invasive procedures) has been suggested to improve the management of patients with non-ST-segment elevation acute coronary syndrome (NSTEACS) admitted to spoke hospitals. We used data from a large prospective Italian registry to describe application, performance and outcome of the service strategy in the daily clinical practice.

METHODS:

This study was based on an observational, post-hoc analysis of all consecutive NSTEACS patients admitted to spoke non-invasive hospitals of the Emilia-Romagna regional network and receiving coronary artery angiography (CAA)±percutaneous coronary intervention (PCI). We evaluated: application of service strategy, time to cath-lab access, hospital stay length, 30-days occurrence of adverse events.

RESULTS:

From January 2011-December 2012, 2952 NSTEACS consecutive patients were admitted to spoke non-invasive hospitals and received CAA. Overall, 1765 (60%) patients were managed with a service strategy. After multivariable analysis, service strategy emerged as independent predictor of faster access to cath-lab (within 72 h: hazard ratio (HR) 2.3, 95% confidence interval (CI) 1.9-2.7, p<0.0001; within 24 h: HR 2.8, 95% CI 2.2-3.3, p<0.0001, respectively). Service strategy significantly reduced hospital stay length (-5.5 days, p<0.0001). We estimated a mean of €1590 saved for each patient managed with service strategy. Thirty-day occurrence of adverse events did not differ between patients managed with or without a service strategy.