TRENDS AND PREDICTORS OF LENGTH OF HOSPITALIZATION IN PATIENTS ADMITTED WITH UNSTABLE ANGINA IN UNITED STATES

Poster Contributions
Poster Hall B1
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Session Title: Epidemiology of ACS Events: Of Comorbidity and Long Term Trends
Abstract Category: 2. Acute Coronary Syndromes: Clinical
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Background: Unstable angina (UA) is the most common presentation of acute coronary syndrome. We performed this study to determine the trends and identify the predictors of length of hospitalization in patients admitted with UA using nationally representative dataset.

Methods: We used the National Inpatient Sample (NIS) from 2002 to 2011 to assess the factors associated with length of stay in patients admitted with unstable angina using ICD-9-CM primary diagnosis codes (411.1, 411.81, and 411.89). All variables pertaining to hospitalization were compared in 3 groups on basis of length of hospital stay (≤1 day, 2-6 days, and ≥ 7 days).

Results: A total of 573,305 patients were admitted with the diagnosis of UA during the study period. The length of hospitalization was ≤1 day, 2-6 days, and ≥7 days in 262191 (45.7%), 293370 (51.2%), and 17744 (3.1%) patients, respectively. In the multivariate analysis, the following demographic and clinical factors were associated with length of hospitalization of ≥2 days: age >65 years (odds ratio [OR] 1.1), women (OR 1.4), African-Americans race (OR 1.7), Hispanic ethnicity (OR 1.5), hypertension (OR 1.1), diabetes mellitus (OR 1.2), chronic lung disease (OR 1.3), CHF (OR 7.0), atrial fibrillation (OR 1.5), renal failure (OR 1.7), valvular heart disease (OR 8.2), peripheral vascular disease (OR 1.3), in-hospital complications such as myocardial infarction (OR 1.1), pulmonary embolism (OR 2.4), deep vein thrombosis (OR 1.9), sepsis (OR 3.1), pneumonia (OR 2.1), and stroke (OR 1.6). Similarly in-hospital procedures such as cardiac catheterization (OR 1.9), percutaneous transluminal coronary angioplasty (OR 1.5), and transfusion (OR 4.7), were associated with longer length of hospitalization of ≥2 days.

Conclusion: More than half of patients admitted with UA stay in hospital for ≥2 days, with most important determinants being pre-existing medical comorbidities and in-hospital complications.