Hospital Treatment Practices for Acute Myocardial Infarction

A review of six years of hospital data regarding patients with acute myocardial infarction (AMI) shows that the use of aspirin, antiplatelets, and beta blockers has risen steadily in accordance with guidelines suggesting that treatment with these agents lowers mortality. An analysis of data from PharmScope Insights, a free hospital-pharmacy benchmarking program, shows the following trends:

- From 1996 to 2001, the use of beta blockers rose by 6.6%.
- Aspirin use rose from 73.2% in 1996 to 87.7% in 2001, an increase of 14.5%.
- The use of antiplatelet therapy more than doubled, from 30% to more than 67%, in the same time period.

These agents, along with anticoagulants, are used to accelerate reperfusion and to prevent re-occlusion after an MI, thereby improving outcomes. As a quality-improvement measure, many facilities monitor the percentage of patients who are discharged from the hospital with these medications. Trending of the data reveals that mortality rates actually increased slightly overall, from 10% in 1996 to 11.3% in 2001. The number of surgical interventions increased by 6%, and the mean length of stay remained constant, at 7 days.

Treatment with injectable anticoagulants has remained steady, with approximately 80% of patients receiving one or more of these drugs after an AMI. Heparin sodium, with an average cost of between $2.22 and $3.29 per patient, remains the leading choice in this class, although it has been losing ground to enoxaparin sodium (Lovenox®, Aventis), whose presence has greatly increased in this market in the past few years. In 1996, only 3.9% of patients who received an injectable anticoagulant after an AMI were using enoxaparin; in contrast, in the second quarter of 2002, 33% were using it. The cost of treatment has increased along with the dose size, as indicated by the 1-mg/kg dosing protocol.

The data cited in Table 1 are available free of charge to hospitals that participate in the PharmScope Insights program. This program specializes in helping hospital pharmacies target areas for performance improvement by providing benchmarks from a panel of 70 hospitals nationwide. For information about joining PharmScope Insights, a division of MediMedia USA, Inc., visit our Website at www.mminfotech.com and click on Hospitals.