COMPARATIVE OUTCOMES OF PERICARDIOCENTESIS VERSUS SURGICAL PERICARDIOTOMY IN PATIENTS WITH CARDIAC TAMPOONADE IN THE UNITED STATES

Poster Contributions
Poster Sessions, Expo North
Saturday, March 09, 2013, 3:45 p.m.-4:30 p.m.

Session Title: Common Cardiac Procedures: Appropriate Use, Outcomes and Education
Abstract Category: 22. Performance Improvement
Presentation Number: 1174-273

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Background: At this time, the comparative in-hospital outcomes for patients with cardiac tamponade undergoing pericardiocentesis or surgical pericardiotomy (pericardial window) are unknown.

Methods: The Nationwide Inpatient Sample (NIS) was used to identify patients with cardiac tamponade who underwent either pericardiocentesis or pericardiotomy in the United States from January 2005 to December 2010. After matching the two groups using propensity scores and the Elixhauser comorbidity risk index, 1807 matched patients were identified in each group.

Results: The in-hospital mortality was significantly higher in the pericardiocentesis group compared to the pericardiotomy group (14.2% vs. 10.5%; p <0.001). Rates of procedure-related hemorrhage (2.2% vs. 0.4%; p<0.001), renal insufficiency (0.5% vs. 0.1%; p=0.021), cardiac complications (7.1% vs. 3.8%; p<0.001) and respiratory complications (2.3% vs. 0.4%; p<0.001) were significantly higher in the pericardiotomy group than in the pericardiocentesis group. LOS was significantly longer (11.4 vs. 8.1 days; p<0.001) and total hospital charges were significantly higher ($105,884 vs. $69,682; p<0.001) in the pericardiotomy group as compare to the pericardiocentesis group.

Conclusion: This observational study demonstrates that, in patients with cardiac tamponade, pericardiotomy is associated with significantly lower in-hospital mortality than pericardiocentesis. However, pericardiotomy was associated with significantly higher morbidity and resource utilization.