FEASIBILITY AND SAFETY OF SAME DAY DISCHARGE AFTER IMPLANTABLE CARDIOVERTER DEFIBRILLATOR IMPLANTATION: A SINGLE CENTER EXPERIENCE

ACC Poster Contributions
Ernest N. Morial Convention Center, Hall F
Tuesday, April 05, 2011, 9:30 a.m.-10:45 a.m.

Session Title: Utilization and Procedural Issues in ICD Implantation
Abstract Category: 29. Defibrillation/Implantable Antiarrhythmia Devices
Session-Poster Board Number: 1164-388

Authors: Saba Darda, Yazan Khouri, Sachin Jain, Rony Gorges, Mershed Al Samara, Michael Shaw, Christian Machado, Providence Hospital, Southfield, MI

Background: Implantable cardioverter defibrillators (ICDs) have become one of the cornerstones in the prevention of sudden cardiac death. Traditionally, ICD implantation is performed as an inpatient procedure followed by a hospital stay of up to several days. This prolonged hospital stay is driven by risk of device-related complications. With the ever-increasing cost of healthcare, it is important to adopt strategies that can reduce cost while maintaining patient safety.

Methods: A retrospective chart review was conducted of patients who underwent ICD implantation at Providence Hospital between 2007 and 2009 and who had same-day discharge. Same-day discharge was defined as discharge to home within the same calendar day, following ICD implantation. Data collected included patient age, comorbidities, concurrent medications, re-hospitalizations and untoward complications documented at the standard two-week wound check follow up.

Results: A total of a 157 patients met study criteria. The mean patient age was 61 ± 14 years. The majority of patients (85%) had cardiomyopathy, with a mean ejection fraction of 28%. More than half (64%) of patients had hypertension and nearly one third (30%) had insulin dependent diabetes. Concurrent medications included aspirin (55%), clopidogrel (27%) and warfarin (20%). The mean length of the procedure was 103 minutes.

No cardiac events, re-hospitalizations or other untoward complications were reported within 24 hours of ICD placement. At the standard two-week follow up appointment, four patients (2%) had surgical site pain, two patients (1%) had wound dehiscence, two patients (1%) had surgical site bleeding, and one patient (0.5%) had fever and implantation site swelling suggestive of infection.

Conclusion: Device-related complications following ICD implantation are rare; thus, same-day discharge is possible. Proper patient stratification is warranted, and could be an effective tool in determining which patients could be safely discharged within the same calendar day following ICD implantation. Based on our observations, same-day discharge is feasible, safe and effective approach for low-risk patients following ICD implantation.