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i2 SUMMIT

IS IT SAFE TO DISCHARGE PATIENTS ON THE SAME DAY AFTER ELECTIVE PERCUTANEOUS CORONARY INTERVENTION?

i2 Poster Contributions
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Sunday, March 14, 2010, 3:30 p.m.-4:30 p.m.

Session Title: DES II, Restenosis, Left Main and Outcomes
Abstract Category: Outcomes/Operator Volume/Public Reporting/Misc. Topics/Guidelines
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Authors: *Andra M. Popescu, Leo Marcoff, Gilbert A. Leidig, Dan Murphy, William S. Weintraub, Ehsanur Rahman, ChristianaCare Health Systems, Newark, DE*

Background: Current general practice in US is overnight hospital observation after elective percutaneous coronary intervention (PCI). Our aim was to determine the incidence of complications, during the observation period, in patients who had no identified in-lab events.

Methods: We retrospectively analyzed the records of all 3542 elective PCIs performed at our institution between 01/01/2004 and 01/31/2009 by all 15 interventionalists. Femoral access was used in 99% of cases. We excluded 9 patients who underwent elective coronary artery bypass surgery after unsuccessful, uncomplicated elective PCI for chronic total occlusion and multivessel disease and 21 patients who had planned staged PCI. All in-lab and out of lab (post-procedure) events were reviewed to determine complications and outcomes.

Results: The remaining 3512 patients had a mean age of 65 years and 72% were males. Stents were used in 93% of patients. Mean number of vessels intervened on per patient was 1.75 and mean number of stents per patient was 1.6. Of these, 295 patients (8.4%) had at least one in-lab event: death, cardiogenic shock, coronary dissection with or without abrupt closure, coronary perforation with or without tamponade, no reflow, stroke, emergent cardiac surgery due to in-lab events, congestive heart failure (CHF), access vessel dissection, in-lab entry site bleed. None of these in-lab events occurred in 3217 patients (91.6%). Twenty seven patients out of 3217 (0.84%) with no in-lab events had unexpected post PCI events before their planned discharge the next day (9 had AV fistula and/or pseudoaneurysm, 6 hematomas, 2 CHF, 2 renal failure, 5 retroperitoneal bleed (RPB), 1 tamponade, one had cardiac arrest 1 hour after PCI and survived after repeat PCI, one had chest pain the following day, repeat cath showed patent coronaries). There were no deaths related to post PCI events.

Conclusions: Elective PCI patients who did not have any of the above listed in-lab events rarely had unexpected events after PCI. Potentially life threatening events (1 tamponade, 5 RPB and 1 cardiac arrest) were all detected within 6 hours. Therefore we conclude that patients with no in-lab events and no events at 6 hours may be safe for early discharge.