CARDIOVASCULAR EVENTS FOLLOWING ESTABLISHMENT OF VASCULAR MEDICINE FELLOWSHIP

Poster Contributions
Poster Hall B1
Sunday, March 15, 2015, 3:45 p.m.-4:30 p.m.

Session Title: PAD and Vascular Medicine
Abstract Category: 45. Vascular Medicine: Non Coronary Arterial Disease
Presentation Number: 1224-336

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Background: Cardiovascular (CV) events are the major cause of death in patients with critical limb ischemia (CLI). Whether CV events can be reduced with the implementation of a Vascular Medicine Fellowship (VMF) is not known.

Methods: Retrospective study performed at a large, urban academic medical center. Data was recorded for 220 CLI patients admitted to the hospital for 2 years before & 2 years after establishment of VMF. The VMF consists of a supervised training program with didactic lectures, supervised patient care and dedicated protocols for guideline directed medical therapy (GDMT) of CLI patients. Demographics, CV risk factors, Rutherford class, type of revascularization, GDMT prescribed at hospital discharge and 30 day outcomes were collected. GDMT was defined as aspirin, statin, beta-blocker, and angiotensin converting enzyme inhibitor (ACEi) based upon the American College of Cardiology/American Heart Association 2013 Guidelines. The primary endpoint was major adverse cardiac events (MACE; death, MI and stroke) and major adverse limb events (MALE; repeat endovascular revascularization, repeat surgical bypass and unplanned amputation) at 30 days.

Results: Ninety seven patients were treated before VMF and 123 after VMF. Demographic and clinical variables were similar between both groups except that HTN was more prevalent and prior MI was less prevalent after VMF. All GDMT was prescribed more frequently after VMF; Aspirin 98% versus 72% (p <0.0001), statin 84% versus 54% (p <0.0001), beta-blockers 60% versus 46% (p=0.04), and ACEi 53% versus 38% (p=0.03). Endovascular treatment occurred more often after VMF, compared to prior, 61% and 20% (p<0.0001). MACE at 30 days was 5% (including 4 deaths and 1 MI) before VMF and 0% after VMF (p=0.01). MALE at 30 days was similar before and after VMF, 4% and 7% respectively (p=0.56).

Conclusion: CLI patients benefit from a multi-disciplinary team approach that includes a dedicated Vascular Medicine Fellowship. The establishment of a Vascular Medicine Fellowship was associated with an increase in the use of endovascular therapy, an increase in guideline directed medical therapy, similar limb outcomes and lower major adverse cardiovascular events.