Vascular surgery readmissions: What can and cannot be modified and why financial penalties for many are unfair

Peter K. Henke, MD
University of Michigan

Causes of readmissions in vascular surgery

Medicare Penalties: HRRP

The hospital payment penalty was implemented in October 2012, deducting 1 percent of every Medicare payment for a hospital that was determined to have “excessive readmissions” for the three measures (AMI, CHF and pneumonia). In October 2013, the penalty increased to 2 percent and in October 2014 to 3 percent. In 2015 additional conditions/measures for the initial inpatient admission will be added to the current three measures and will include readmissions following an acute exacerbation of chronic obstructive pulmonary disease (COPD), and following an elective total hip arthroplasty (THA) or total knee arthroplasty (TKA).

So, no vascular procedures yet……..

Medicare Penalties if HRRP occurs

But, LEB is planned in the near future given high rates of readmission

LEB: claudication to RP/TL (high risk)

Readmission rate 15%

Gonzalez A, ... Osborne N. unpublished data
What are common preoperative factors and postoperative causes for readmissions?

Causes of readmissions in vascular surgery

Unplanned readmissions after vascular surgery

ACS-NSQIP data 2011
N = 11,246 vascular operative pts

Causes of readmissions in surgery

Underlying Reasons Associated With Hospital Readmission Following Surgery in the United States

Readmissions are $$

Cost analysis of vascular readmissions after common vascular procedures

What we probably can’t change:
Obesity, DM, frailty, emergent case, CLI presentation

How might we prevent the most common causes of readmissions – SSI?
Causes of readmissions: SSI factors

Factors associated with surgical site infection after lower extremity bypass in the Society for Vascular Surgery (SVS) Vascular Quality Initiative (VQI)

VQI 2003-12
N = 7908 LEB
SSI = 4.8%

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Factors associated with SSI in depth

Incidence of SSI (2012-2014) is 264/2763 (9.6%)
• 35 (13.3%) prior to discharge
• 226 (85.6%) readmitted within 30 days
• 3 (1.1%) both pre-discharge and post discharge

Prevention strategies: SSI and Readmission

Recommended Best Practices to Prevent SSI – and thus Readmission

• Prophylactic antibiotics – timing and type
• MRSA colonized patient
• Vanco/Dapto?
• Prevent hypothermia, maintain nl glucose, ? hyperoxia ?
• Subcuticular closure?
• Work faster!
• Judicious blood transfusion
• Skin prep preop: chlorhexidine-EtOH
• Vertical vs. transverse incisions for groins
  • 28% vs. 12% infection
  • Swinnen etal. Ann Vasc Surg 2010