BACKGROUND

• Despite clinical evidence demonstrating the efficacy of statin therapy in preventing cardiovascular mortality in individuals who peripheral artery disease (PAD), underutilization is an ongoing healthcare issue
• Annual overall major cardiovascular event rate of approximately 20-60% and 40% increase in stroke risk with the presence of PAD after lower extremity revascularization
• Reduction in serum LDL-C of at least 25mg/dl significantly reduces the rate of progression of atherosclerotic disease and cardiovascular risk reduction
• Strong evidence supports statin use in patients with PAD to reduce cardiovascular events, mortality, and may reduce the need for multiple revascularization

OBJECTIVES

• To improve medical management using statin therapy
• To improve discharge statin prescription rate in an inpatient setting
• To improve compliance and promote awareness

METHODS

• Prescribed statin therapy to patients who have undergone endovascular or surgical therapy
• Obtained pre-op lipid and hepatic panel
• Stratified between statin naïve and non-naive
• Educated patients and their families
• Sent discharge referral letters
• Obtained 3-month post-op LDL-C levels

LITERATURE REVIEW

4 STATIN BENEFIT GROUPS

• MI
• Stroke
• Coronary Artery Disease
• PAD
• LDL>190mg/dl
• Diabetes
• 10 yr. ASCVD risk factor >7.5%
• moderate – high dose ideal LDL <70mg/dl

RESULTS

• Change in LDL-C at 3 months

- Statin Naïve
  - 31(72%)
  - Low dose 4
  - Moderate dose 20
  - High dose 9

- Non-statin Naïve
  - 12 (28%)

- Change in LDL-C 3 months

- Statin Naïve
  - 29 ± 10.6
- Non-statin Naïve
  - 42 ± 15.6

- 33.3 Mean decrease in LDL-C

- Critical t value = 2.03
  - t = 8.96
  - P = 0.001

- 95% Confidence Interval of the Difference

- Pre-LDL
- Post LDL

- LDL-C mg/dl

- 86.3
- 55.9

- 60 ± 31.5
- 42 ± 16.2

- CLINICAL SIGNIFICANCE

• Adherence to statin use correlated with reductions in LDL after 3 months of statin therapy initiation resulted in ideal LDL level of <70mg/dl
• No hospital readmission or repeat revascularization
• Establishment of a protocol called STEP PAD to ensure failure to prescribe
• Evidenced-based dose statin therapy resulted in improvement in standards of care
• STEP PAD results validated previous clinical research

RECOMMENDATIONS

• Continue clinical trials using EBD statin therapy to investigate
  - MACE
  - MALE and restenosis
  - limb pain/pain free-walking

• Establish interventions
  - Adherence and compliance in long-term follow up
  - Patient-focus
  - Provider-Patient relationship

CONCLUSION

• Appropriate identification of patients with PAD after lower extremity revascularization is essential for optimal medical management using EBD statin
• Significance of interprofessional collaboration and quality patient care to improve outcomes
• Patient education on the importance and benefits of statin therapy as it relates to their disease process and progression is necessary to achieve improved adherence and compliance

REFERENCES