Peripheral Artery Disease in Black Women: A Single Institution Experience

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BACKGROUND

There is a paucity of literature examining outcomes in black women, specifically. The aim of this study is to examine the outcomes in black women who underwent an endovascular first approach.

METHODS

The Vascular Quality Initiative was queried between 2013-2022. Preoperative risk factors, perioperative morbidity/mortality were collected. Time between index intervention and ipsilateral intervention or amputation was calculated.

RESULTS

Baseline Comorbidities (Table I)
- 161 patients met inclusion criteria
- Preoperative medications: 57.1% were on aspirin and 66.5% were on a statin.
- Most frequent indications for intervention: chronic limb threatening ischemia (58.4%), claudication (27.3%).
- Most frequently treated arteries: superficial femoral (27%) and anterior tibial (16%) arteries.
- Technical success od the index operation: 93.4% of cases
- 6.1% re-thrombosed within 30 days.

Long Term Follow-up:
- Median follow-up: 374 days
- Mean change in ABI: 0.06 +/- .27
- Sixty-four patients (39.8%) required ipsilateral reintervention with median time to reintervention of 145 days.
- Rate of MALE was (10%) with a median time to amputation of 71 days.

CONCLUSION

Black women had high rates of known atherosclerotic risk factors, despite many not receiving appropriate primary prevention. Patients tended to present with late-stage disease (i.e. CLTI). Although technical success rate was high, over one-third of patients required re-intervention and 10% of patients experienced a major adverse limb event, most within a year. Our findings reinforce the importance of aggressive primary prevention and improved early access to care.

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TABLE I

Variable	Absolute Number (%)
Age	67.5 +/- 13.4
Body Mass Index	27.6 +/- 6.7
Elective	149 (92.5%)
Cerebrovascular Disease	40 (24.8%)
Coronary Artery Disease	40 (24.8%)
Coronary Artery Bypass Graft	10 (6.2%)
Percutaneous Coronary Intervention	27 (16.8%)
Congestive Heart Failure	21 (13.1%)
Dysrthymia	11 (6.8%)
Diabetes	100 (62.1%)
End Stage Renal Disease (on dialysis)	27 (16.8)
Calciphylaxis	4 (2.5%)
Hypertension	142 (88.2%)
Hyperlipidemia	102 (70.3%)
Active Smoking	56 (34.8%)
Prior Smoking	32 (19.9%)
Autoimmune Condition	27 (16.8%)
Inherited Hypercoagulability Condition	15 (9.3%)
Preoperative Medication	
Aspirin	92 (57.1%)
Anticoagulation	25 (15.5%)
Anti-platelet	48 (29.8%)
Statin	107 (66.5%)
ACE/ARB*	71 (44.1%)
Cilastazol	7 (4.3%)
Betablocker	54 (33.5%)
Prior Lower Extremity Intervention**	47 (30.1%)
Prior Lower Extremity Amputation	22 (13.7%)
ABI (R)	0.73 +/- 0.3
ABI (L)	0.75 +/- 0.3

*Angiotensin-Converting Enzyme Inhibitor or Angiotensin II Receptor Blocker
**defined as either peripheral vascular intervention, bypass or endarterectomy

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