Expected Outcomes In Patients With CLTI Following Revascularization With Complete Follow up

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Objectives

- Patients with chronic limb threatening ischemia (CLTI) are known to have a reduced life expectancy
- Revascularization is chosen based on anatomic features as well as expected survival.
- However, the natural history of patients who have undergone revascularization based on a real-world, individualized approach to appropriate case and procedure selection has not been reported.
- Goal:
 - Assess the survival, amputation-free survival (AFS),
 MALE/Mortality-free survival following individualized
 revascularization in patients with CLTI with complete
 follow up
 - Identify patients who are likely to survive longer.

Methods

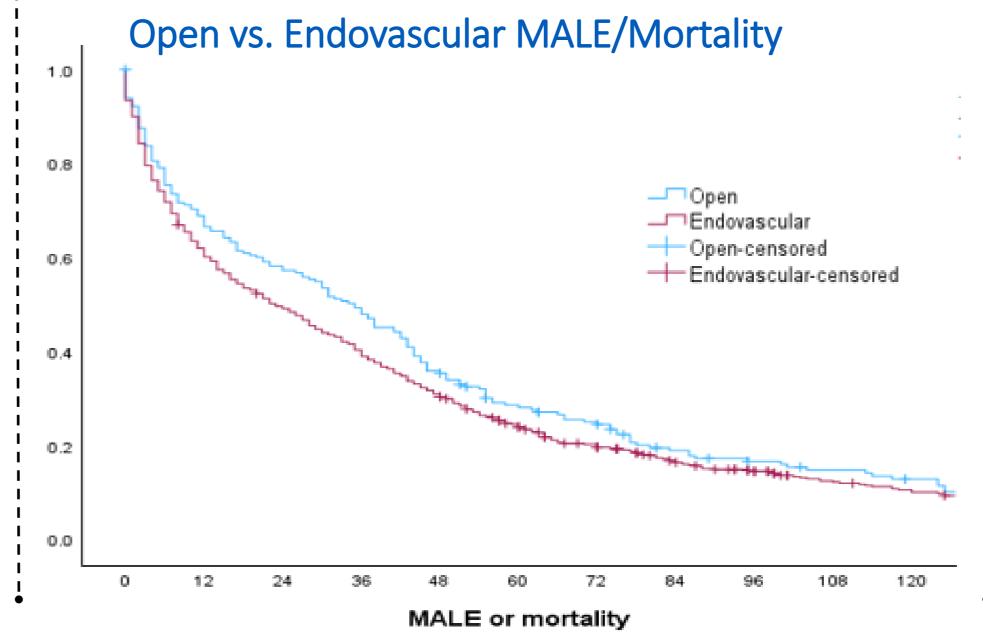
- All consecutive patients who had revascularization for CLTI between 1/2003-8/2020 were included.
- Only the index limbs were included.
- All patients had complete follow up for at least 48 months or until death.
- Patients who died within 0-47 months (Group I, N=487)
 were compared to those who died or were followed for
 48-71 months (Group II, N=152) and 72-120 months
 (Group III, N=258).

Demographics

Comorbidities and C	Comorbidities and Clinical Characteristics in Groups				
	Group I (N=479)	Group II (N=146)	Group III (N=256)		
Age	75.0±10.1	71.0±10.0	65.5±9.4	<0.001	
CAD	66.1%	56.6%	39.5%	<0.001	
Hypertension	78.9%	84.2%	75.2%	0.098	
DM	62.2%	59.2%	50.8%	0.01	
Hyperipidemia	74.7%	82.9%	72.9%	0.06	
COPD	24.6%	22.4%	19.8%	0.317	
CKD/ESRD	45.4/11.3%	43.4/8.6%	17.4/2.7%	<0.001	
Smoker	24.3%	32.9%	52.3%	<0.001	
Beta-blocker	61.6%	57.2%	48.4%	0.003	
Statin	57.9%	69.1%	57.8%	0.037	
ACEI	46.8%	57.9%	49.2%	0.058	
Rutherford III/IV/V	12.1/55.9/32.0%	17.8/64.5/17.8%	31.8/46.5/21.7%	<0.001	
Ambulatory	71.0%	88.2%	91.5%	<0.001	
Level of intervention AI/FP/IP	10.1/37.0/53.0%	11.8/40.8/47.4%	17.8/42.6/39.5%	0.003	
Ev/hybrid/open	70.6/13.1/16.2%	67.1/13.8/19.1%	59.7/20.9/19.4%	0.025	

Results

- A total of 897 patients were included, with 53.3±49.0 mo (range 0-250mo) follow-up.
- The 1mo, 48mo, 72mo and 120mo limb salvage was 98.4%,
 84.1.4±%, 82.8±1.6% and 79.2±2.0%.
- Group II and III were younger, less likely to have CAD, DM, CKD, ESRD, CVD, and were more likely to be ambulatory compared to Group I.
- Statin use was similar in Groups I and III, and higher in Group II, and Group III had more open revascularizations than other groups (P=0.035 III vs I and II).
- During last follow up, patients in Group I were less likely to have intact skin without an amputation (58.2% vs 76.0% vs 76.6% (P<0.001)).



Overall Survival					
	1 mo	48 mo	72 mo	120 mo	
All (881)	96.7%	45±2%	31±2%	14±1%	
Open (216)	95.8%	51±3%	38±3%	18±3%	
EV (665)	97.0%	43±2%	29±2%	13±2%	

p = 0.02

Amputation Free Survival					
	1 mo	48 mo	72 mo	120 mo	
All (881)	95.1%	39±2%	27±2%	13±1%	
Open (216)	95.8%	51±3%	38±3%	18±3%	
EV (665)	97.0%	43±2%	29±2%	13±2%	

p = 0.02

MALE or Mortality-Free Survival					
	1 mo	48 mo	72 mo	120 mo	
All (881)	93.5%	32±2%	21±1%	11±1%	
Open (216)	94.0%	35±3%	25±3%	13±3%	
EV (665)	93.4%	30±2%	20±2%	10±1%	

p = 0.127

Conclusion

Patients with CLTI represent a highly challenging group with over half expected to die within 4 years. However, the other half will survive up to 10 years or more. Younger patients, despite higher smoking rates, have the potential for significant long-term survival and therefore merit consideration for more aggressive treatment.