

Table. Comparison of patient's characteristics between SISMAD and CASMAD

Characteristic	SISMAD (n = 47)	CASMAD (n = 43)	P value
Age (year), mean (range)	55 (40-85)	58 (40-79)	.156*
Gender, male	43 (94%)	27 (71%)	.006 [†]
Abdominal symptom	39 (85%)	8 (21%)	.001 [‡]
Coexisting medical conditions			
Hypertension	14 (30%)	25 (66%)	.001 [‡]
Abdominal aortic aneurysm	3 (7%)	7 (18%)	.174 [†]
Bowel gangrene	0	1 (3%)	.452 [†]
Smoking	17 (37%)	14 (37%)	.991 [‡]
Hypercholesterolemia	4 (9%)	7 (18%)	.212 [†]
Marfan's syndrome	1 (2%)	5 (12%)	.100 [†]

Comparison of the patients' characteristics was conducted excluding patients with Marfan's syndrome.

*Mann-Whitney test;

[†]Fisher's exact test;

[‡]Chi square test

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RR24.

Infrainguinal Bypass Is Associated With Higher Survival Than Major Amputation in Patients With Severe Comorbidities

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Objectives: Major amputation (AMP) is often selected over infrainguinal bypass (IB) in patients with severe systemic comorbidities because of presumed decreased risk. This study was undertaken as a risk-adjusted comparison of early postoperative mortality and morbidity of high-risk patients undergoing IB and AMP.

Methods: The 2005-2008 NSQIP database was used to identify all patients undergoing either IB or AMP using procedural codes. Patients with systemic or local infections were excluded. A subset of high risk patients were then defined as (1) American Society of Anesthesiologists (ASA) Class 4 or 5; or (2) ASA 3 with either congestive heart failure within 30 days, MI within 6 months, renal failure (serum creatinine >3mg/dL or dialysis), dyspnea at rest, or ventilator dependence. Propensity score matching was used to obtain two groups (AMP or IB) from the high-risk patient subset matched in preoperative characteristics.

Results: Propensity score matching resulted in an AMP group (n = 792) and an IB (n = 780), with no significant differences among the demographic, preoperative, or anesthetic variables. In this risk-adjusted propensity-matched comparison, IB was associated with a lower 30-day postoperative mortality than AMP (6.54% vs 9.97%, $p = 0.0147$). AMP was associated with higher rates of pulmonary embolism (0.9% vs 0%, $p = 0.009$) and urinary tract infection

(5.2% vs 2.7%, $p = 0.01$), while bypass was associated with significantly higher rates of return to OR (14.1% vs 27.6%, $p < 0.001$) and a trend toward higher bleeding events requiring transfusion (0.9% vs 2.1%, $p = 0.054$). There was no difference in the overall distribution of major adverse events between the AMP and IB groups, and postoperative length of stay did not differ between the two groups. Graft survival was 91.41% at 30 days.

Conclusions: The decision to perform IB vs AMP should depend on well-established predictors of graft patency and functional success rather than presumptions about different perioperative risks between the two procedures.

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RR25.

Iliac Artery Stenting Combined With Open Femoral Endarterectomy Is As Effective As Open Surgical Reconstruction for Severe Aortoiliac and Common Femoral Occlusive Disease

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Objectives: To compare the outcomes of hybrid repair (HR) combining iliac artery stenting and open common femoral endarterectomy (CFE) with open aortoiliac and femoral reconstruction (OR) in patients with extensive aortoiliac and common femoral occlusive disease (AIFOD).

Methods: Between 1998 and 2008, 92 patients (164 limbs) underwent OR (72 aortobifemoral and 20 iliofemoral), and 70 patients (84 limbs) underwent HR (20 common iliac, 41 external iliac, and 23 combined common and external iliac artery stenting). All patients in both groups underwent concomitant CFE. Mortality, patency, limb-salvage, reinterventions, and procedure-related complications were analyzed.

Results: HR patients were older (68 ± 12 vs 61 ± 13 years; $p = 0.003$), had higher co-morbidity scores, but similar TASC classification and runoff scores compared to OR. Technical success was $\geq 99\%$ in both groups with significant improvement in ankle-brachial indices (HR 0.52 ± 0.18 to 0.77 ± 0.23 , $p = 0.001$; OR 0.48 ± 0.23 to 0.77 ± 0.22 , $p = 0.001$). Thirty-day morbidity (HR 3% vs OR 5%, $p = 0.55$) and mortality (HR 1.1% and OR 1.4%, $p = 0.85$) were equivalent. At 5 years, primary patency (91% vs 93%, $p = 0.29$), primary assisted patency (94% vs 95%, $p = 0.49$), and secondary patency (97% vs 98%, $p = 0.115$) were similar for HR and OR respectively. However, long-term survival and limb salvage were higher for OR (74% vs 40%, $p = 0.007$) and (100% vs 94%, $p = 0.003$).