

Doktor Bildirileri - Aort (Abdominal) Patolojileri ve Cerrahisi/Endovasküler Girişimler

[SSB-063]

Outcomes of supraceliac clamping in ruptured abdominal aortic aneurysms

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Background and Aim: Complex infrarenal or juxtarenal abdominal aortic aneurysms(AAA) preclude infrarenal clamping and endovascular techniques. In these cases, supraceliac clamping is often required. Despite the adverse events such as visceral, and spinal ischemia, supraceliac clamping becomes inevitable for rapid bleeding control and safe anastomosis in ruptured AAAs. We aimed to present outcomes of supraceliac clamping in patients with ruptured AAA.

Methods: Patients who underwent emergency surgery for ruptured AAA between January 2017 and June 2022 were included. The patients were divided into two groups according to the clamping technique. (Infrarenal vs. Supraceliac) Baseline characteristics and perioperative factors were investigated. Intensive care unit (ICU) and hospital stays, mortality, and complications were evaluated between the groups.

Results: 29 patients who met the inclusion criteria were evaluated. The mean age was 76.6 ± 6.4 , and 18 (62.1%) patients were male. The groups were similar regarding age (76.2 ± 6.3 vs. 77.6 ± 7.1 , $p=0.590$), body mass index (31.8 ± 4.8 vs. 29.1 ± 2.4 , $p=0.222$), hypertension (47.6% vs. 50%, $p=0.909$), hypotensive shock (28.6% vs. 37.5%, $p=0.642$), renal impairment (71.4% vs. 75%, $p=0.847$), size of aneurysm (7.2 ± 1.6 vs. 7.3 ± 1.7 , $p=0.764$), and extended clamp time (>25 mins) (28.6% vs. 37.5%, $p=0.675$). Four patients in supreceliac group were with juxtarenal AAA, and four were with infrarenal AAA. No significant differences were found regarding ICU stay (6.6 ± 3.7 vs. 6.4 ± 6.5 , $p=0.167$), hospital stay (17.6 ± 6.9 vs. 16.3 ± 12.1 , $p=0.159$), and mortality (33.3% vs. 37.5%, $p=0.833$) between the groups.

Conclusions: No significant increase was observed in ICU stay, hospital stay, mortality, and complication rates in patients with supraceliac clamping. Supraceliac clamping could be preferred in cases with juxtarenal AAA, hypotensive shock, and unsuitable anatomy for infrarenal clamping.

Keywords: Supraceliac clamp.

Table 1. Preoperative characteristics

	Infrarenal clamping (n=21)	Supraceliac clamping (n=8)	p
Hypotensive shock	6 (28.6%)	3 (37.5%)	0.642
Pre-op. renal impairment	15 (71.4%)	6 (75%)	0.847
Pre-op. Anemia (Hb<10g/dL)	7 (33.3%)	3 (37.5%)	0.833
Size of aneurysm	7.2 ± 1.6	7.3 ± 1.7	0.764
Proximal level of aneurysm	Infrarenal	Infrarenal, 4 (%50) Juxtarenal, 4 (%50)	0.003

Pre-op: preoperative, Hb: hemoglobin

Table 2. Operative and postoperative characteristics

	Infrarenal clamping (n=21)	Supraceliac clamping (n=8)	p
Extended clamp time(>25mins)	6 (28.6%)	3 (37.5%)	0.675
Supraceliac clamp time	-	13.4 ± 10.3	-
Two-stage clamping	-	6 (75%)	-
Length stay of ICU	6.6 ± 3.7	6.4 ± 6.5	0.167
Length stay of Hospital	17.6 ± 6.9	16.3 ± 12.1	0.159
Mortality	7 (33.3%)	3 (37.5%)	0.833

ICU: intensive care unit

Doktor Bildirileri - Anesteziyoloji ve Reanimasyon

[SSB-060]

Açık kalp cerrahisi geçiren hastalarda ekstrakorporeal dolaşım sonrası gelişen vazoplejik sendromu preoperatif dönemde risk skorlarına bakarak öngörebilmek mümkün mü?

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Giriş ve Amaç: Vazopleji; hipotansiyon, taşikardi ve düşük sistemik vasküler direnç ile karakterize normal veya yüksek kalp debisine rağmen düşük doku perfüzyonu durumunu belirtir. Açık kalp cerrahisi geçiren hastaların %5-50'sinde görülüp yüksek morbidite ve mortalite riski nedeniyle akılda tutulması gerekir. Bu çalışmada preoperatif risk skorları ile vazoplejiyi ön görebilme olasılığı amaçlanmıştır.

Yöntem: Bu çalışmada 1 Ocak 2018 - 31 Haziran 2021 tarihleri arasında Bakırköy Dr. Sadi Konuk EAH Etik kurul izni alındıktan sonra elektif açık kalp cerrahisi nedeniyle ekstrakorporeal dolaşım uygulanan ASA II-IV olan hastalar (≥18 yaş) geriye dönük çalışmaya dahil edildi. Ekstrakorporeal dolaşımın sonlandırılması sonrasında CI > 2.5 l/min/m², SVV <12, SVR <800 dyne s/cm⁵ ve OAB <60 mmHg, olup noradrenalin infüzyonu başlanılan hastalar dahil edildi. Hastaların demografik özellikleri, komorbiditeleri, EF leri, EuroSCORE II, Sistemik İmmün-İnflamatuvar İndex (SII), APACHE II, SOFA, NYHA III/IV değerleri, kullandığı ilaçlar, YBÜ yatış süresi, invaziv mekanik ventilasyon süresi, taburculuk şekli, replase edilen kan ve kan ürünleri varsa komplikasyon ve morbiditeleri, cerrahi işlem, hipotermi düzeyi, operasyon, ekstrakorporeal dolaşım ve kros klemp süresi kaydedildi.

Bulgular: Kliniğimizde 3.5 yıllık süreç içinde toplam 1205 açık kalp cerrahisi operasyonu gerçekleştirilmiş, 101 hastada vazopleji tanımlanmıştır. Demografik veriler, yatış ve mekanik ventilasyon verileri Tablo 1'de gösterilmiştir. Vefat eden hastaların NYHA, EUROSCORE, SOFA, APACHE skorları yaşayanlara göre istatistiksel olarak anlamlı düşük saptanmıştır (hepsi için p<0.001). Risk faktörlerinin dağılımı Tablo 2'de gösterilmiştir.

Tartışma ve Sonuç: Vazopleji sendromunda tahminin edilen aksine prognostik skorların daha düşük olduğu gözlenmiştir. Bu nedenlerle risk faktörlerin çoklu olması vazopleji sendromu için klinisyenin daha dikkatli monitorizasyonuna ihtiyaç duyulmaktadır.

Keywords: Vazoplejik sendrom.

Tablo 1. Hastaların yaş, cinsiyet EF, komorbidite, kullandığı ilaçlar, yoğun bakımda yatış süreleri ve mekanik ventilasyon süresi

Yaş Ort.±SD (Min-Maks)	61,2±11,4 (25-87)	
Cinsiyet n (%)	Erkek	%71,0
	Kadın	%29,0
Komorbidite n (%)	Yok	%4,0
	HT	%40,0
	DM	%11,0
	HT+DM	%8,0
	KOAH+Astım	%2,0
	Multipl	%22,0
	SSS	%3,0
	KBY/ABY	%1,0
	Diğer	%9,0
Kullandığı İlaçlar Median (Min-Maks)	1 (0-9)	
EF Median (Min-Maks)	50 (40-60)	
YBÜ yatış süresi Median (Min-Maks)	96 (24-912)	
Mekanik Ventilasyon Süresi Median (Min-Maks)	24 (1-336)	
Taburculuk Şekli	Şifa	%30,0
	Ex	%70,0

Demografik veriler, yatış ve mekanik ventilasyon süresi.

Tablo 2. Taburculuk şeklinde sistemik immün inflamatuvar indeks, NYHA, EuroSCORE, SOFA, APACHE skorları

	Taburculuk Şekli		
	Şifa	Ex	p
Sistemik İmmün-Inflamatuvar İndex	Median (Min-Maks)	Median (Min-Maks)	
	799,5 (157-10750)	948,86 (119,9-11184)	0,886
NYHA III/IV	4 (1-4)	2 (1-4)	<0,001
EUROSCORE II	11,87 (1,09-71)	3 (0,62-57)	<0,001
SOFA	4 (1-13)	2 (0-8)	<0,001
APACHE II	16 (6-35)	10 (2-33)	<0,001

Taburculuk şeklinde sistemik immün inflamatuvar indeks, NYHA, EUROSCORE, SOFA, APACHE skorları

Doktor Bildirileri - Koroner Arter Hastalıkları ve Cerrahisi

[ÖSB-26]

The relationship between the systemic immune-inflammation index and saphenous vein graft disease in patients with coronary bypass

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Background and Aim: A continuous inflammation plays a role in the development and acceleration of atherosclerosis. The systemic immune-inflammation index (SII) is an important predictor of atherosclerosis. An inflammation and atherosclerosis are held responsible for the pathophysiology of saphenous vein graft disease (SVGd) in the late period after bypass surgery. The aim of this study was to evaluate the relationship between the level of SII, which is an easy-to-reach inflammatory marker, and the presence of SVGd in patients with coronary bypass.

Methods: In this retrospective study, a total of 175 patients with saphenous vein grafts included. Presence of SVGd was defined as at least one saphenous vein grafts with $\geq 50\%$ stenosis. Accordingly, the patients were divided into two groups as those with and without SVGd. The SII was calculated with the following formula: (neutrophil count \times platelet count)/lymphocyte count.

Results: Mean white blood cell, mean neutrophil, median age of SVG, and SII were significantly higher in patients with SVGd. In multivariate regression analysis, SVG age (OR: 1.08, $p < 0.001$) and SII (OR: 1.17, $p < 0.001$) were found to be independent predictors of SVGd. A positive correlation was found between the age of SVG and SII levels ($r = 0.395$, $p < 0.001$). In the receiver-operating characteristic curve analysis, the cutoff value of > 590.5 for SII has a 71.8% sensitivity and 76.0% specificity for prediction of SVGd.

Conclusions: Increased SII levels were an independent predictor of SVGd. SII can be a potential screening tool in detecting patients who develop SVGd after coronary bypass.

Keywords: Saphenous vein graft disease.

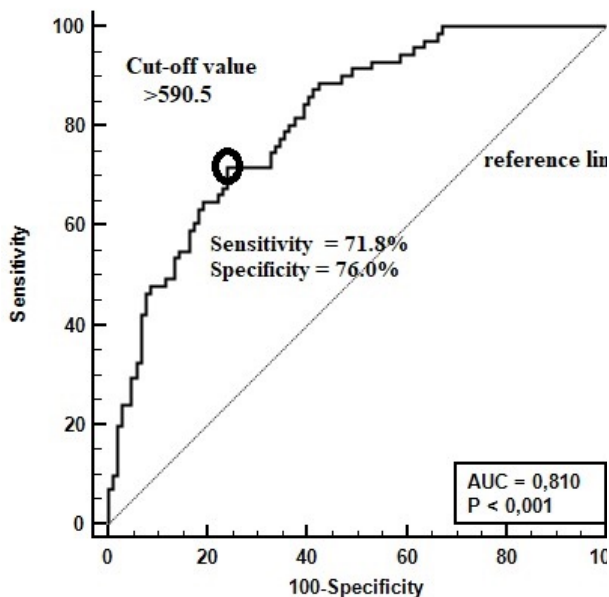


Figure 1. The ROC curve of SII for the prediction of saphenous vein graft disease.

In the receiver-operating characteristic curve analysis, the cutoff value of > 590.5 for SII has a 71.8% sensitivity and 76.0% specificity for prediction of SVGd.

Table 1. Baseline demographic characteristics of the study population

Variables	SVGd (-) n=104	SVGd (+) n=71	p
Age, years	64.0 \pm 10.7	65.4 \pm 11.3	0.407
Female gender, n(%)	80(76.9)	52(73.2)	0.596
Hypertension, n(%)	68(65.4)	48(67.6)	0.871
Diabetes mellitus, n(%)	36(34.6)	27(38.0)	0.749
Smoking, n(%)	14(13.5)	12(16.9)	0.526
Prehospital treatments			
RAS blocker, n(%)	74(71.2)	47(66.2)	0.509
β -blocker, n(%)	89(85.6)	62(87.3)	0.825
Acetylsalicylic acid, n(%)	100(96.2)	67(94.4)	0.851
Statin, n(%)	47(45.2)	30(42.3)	0.701
LVEF, %	53.8 \pm 7.1	52.4 \pm 8.6	0.242
Age of SVG, years	4(2-8)	6(4-10)	$< 0.001^*$
Number of SVGs	1.9 \pm 0.5	2.0 \pm 0.6	0.877
Hemoglobin, g/dL	14.1 \pm 1.6	13.9 \pm 1.4	0.434
WBC, $\times 10^9/L$	7.2 \pm 2.2	7.9 \pm 2.3	0.036*
Neutrophil, $\times 10^9/L$	4.1 \pm 1.2	5.2 \pm 1.5	$< 0.001^*$
Platelet, $\times 10^9/L$	299.4 \pm 64.8	310.2 \pm 61.8	0.273
Lymphocyte, $\times 10^9/L$	2.2 \pm 0.8	2.1 \pm 0.6	0.615
RDW	13.8 \pm 1.3	13.9 \pm 1	0.873
Total cholesterol, mg/dL	200.5 \pm 42.8	214.7 \pm 37.9	0.903
LDL, mg/dL	123.3 \pm 37.1	125.6 \pm 33.9	0.683
HDL, mg/dL	48.7 \pm 13.0	44.1 \pm 12.1	0.255
Triglyceride, mg/dL	145.5(101-202)	158.5(104-178)	0.751
hs-CRP, mg/dL	2.6(1.2-4.7)	4(2.6-6.9)	$< 0.001^*$
SII	513.8(477.6-590.4)	682.1(559.8-880.7)	$< 0.001^*$

* $p < 0.05$ shows statistical significance. Abbreviations: hs-CRP, high sensitive C-reactive protein; HDL, high-density lipoprotein; LDL, low-density lipoprotein; LVEF, left ventricular ejection fraction; RAS, renin-angiotensin system; RDW, red cell distribution width; SII, systemic immune-inflammation index; SVG, saphenous vein graft; SVGd, saphenous vein graft disease; WBC, white blood cell.