

Variables	Maximal relative temporal muscle pedicle volume		Univariate analysis		Multiple regression analysis	
	mean (95% confidence interval)		P value		Coefficient (β)	95% Confidence Interval Significance
Age at surgery [years]			0.3372		0.0037	-0.009221 to 0.01656 0.557
			$\beta=0.003337$			
Age group			0.6051			
Adult (> or =16years)		1.31 (1.20-1.43)				
Pediatrics (< or =15years)		1.24 (1.00-1.48)				
Sex			0.8691			
Male		1.32 (0.95-1.70)				
Female		1.30 (1.19-1.41)				
Side			0.0448		0.124	-0.1393 to 0.3865 0.988
Left		1.39 (1.24-1.55)				
Right		1.19 (1.06-1.33)				
Clinical presentation (ICH)			0.4226			
ICH		1.18 (0.95-1.42)				
no ICH		1.32 (1.20-1.43)				
Clinical presentation (TIA)			0.0319		-0.0399	-0.3233 to 0.2436 0.776
TIA		1.20 (1.07-1.34)				
no TIA		1.42 (1.26-1.58)				
Clinical presentation (Infarct)			0.0044		0.224	-0.06396 to 0.5126 0.123
Infarct		1.49 (1.30-1.68)				
no Infarct		1.20 (1.09-1.31)				
Suzuki's angiographical stage			0.3062			
			$\beta=-0.06407$			
Comorbidities (HT)			0.6018			
HT		1.27 (1.07-1.47)				
no HT		1.32 (1.19-1.45)				
Comorbidities (DM)			0.6198			
DM		1.22 (0.95-1.48)				
no DM		1.31 (1.20-1.42)				
Comorbidities (DLp)			0.5674			
DLp		1.26 (1.03-1.49)				
no DLp		1.32 (1.21-1.44)				
Preoperative systemic immune inflammation index			0.749			
			$\beta=0.000032$			
<i>RNF213</i> p.R4810K			0.0041		0.485	0.1449 to 0.8257 0.0078
G/A variant		1.39 (1.27-1.51)				
G/G wild-type		1.07 (0.93-1.21)				
Preoperative antiplatelet agent			0.8734			
aspirin		1.30 (1.19-1.40)				
cilostazol		1.32 (0.95-1.69)				
Operation time [minutes]			0.473			
			$\beta=-0.001068$			
Cranial window for muscle insertion [mm2]			0.2549			
			$\beta=0.0004063$			

TABLE 2. Analysis of factors associated with maximal relative temporal muscle pedicle volume after STAMCA anastomosis with EDMS in all the 37 hemiepsileses. ICH, intracranial hemorrhage; TIA, transient ischemic attack; HT, hypertension; DM, diabetes mellitus; DLp, Dyslipidemia