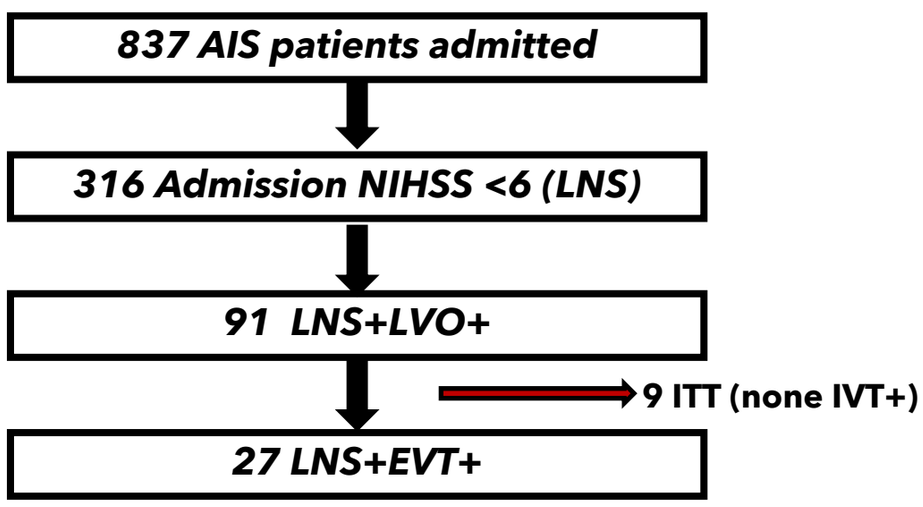
LARGE VESSEL OCCLUSION WITH LOW NIHSS SCORE: WHAT TO DO?

Koyuncu B[1], Bajrami A[2], Nar Senol P[1], Ogun MN[1], Onalan A[1], Pourmohammed R[2], Yabalak A[3], Tolun R[1], Geyik S[4], Krespi Y[1]

1Istinye University, Liv Hospital, Department of Neurology, Istanbul, Turkey
2 Istanbul Aydın University, Florya Medicalpark Hospital, İstanbul, Turkey
3 Pendik Medicalpark Hospital, Istanbul, Turkey
4 Istinye University, Department of Radiology, Istanbul, Turkey

BACKGROUND: There is insufficient evidence to treat patients with acute ischemic stroke (AIS) with a low NIHSS score (LNS) in the presence of large vessel occlusion (LVO). Our aim was to assess the characteristics of patients with/without endovascular treatment (EVT) in patients with LNS.

METHOD: Brain Angiography and Stroke Centers (BASC) network that is constituted by three strategically located comprehensive stroke centers that uses RAPID technology and provide services for Istanbul. Data of patients with LNS defined as NIHSS<6 and LVO who were admitted consecutively between October 2017 and September 2018 were assessed. In these patients LVO was demonstrated with BTA/MRA or DSA.



RESULTS: Out of 837 AIS patients that were prospectively recorded 316 presented with LNS, 91 had LVO and 27 patients received EVT (LNS-EVT). When compared with medical group, LNS-EVT had no difference in demographics, infarct characteristics (volume, presence of mismatch) and IV thrombolysis rate. There were significantly more M1 occlusions (37% vs 9,4%; p:0.005) in the LNS-EVT group. Hemorrhagic complications were 3,7% and 1,8% (p:1), good outcome (3-months mRS 0-2) 58% and 54% (p:0.816) and mortality were 12% and 9% (p:0.7) in LNS-EVT and medical patients, respectively.

CONCLUSION: Similar outcome in EVT and medical arm can cautiously suggest that EVT may be safe and beneficial in LNS patients but randomized comparison is needed.

	No EVT (n:222) No LVO*	No EVT (n:64) Yes LVO &	EVT⌘ (n:27)	p
Male	*63,1%*	50%	55,6%	0.653
Age mean+/-SD	*66+/-14*	67+/-12	63+/-16	0.158
Age>80	*15,8%*	18,8%	11,1%	0.539
Withnessed	*83,5%*	74,6%	77,8%	1
ODT	*564+/-843*	582+/-477	324+/-263	**0.002**
ODT360d min	*61%*	44,1%	66,7%	**0.065**
DM	*40,1%*	51,6%	33,3%	0.167
AF	*24,8%*	25%	44,4%	**0.084**
NIHSS	*2.4+/-1.7*	3+/-1	3+/-1.6	0.392
DIT	*17+/-20*	16+/-18	11+/-7	0.158
IVT	*7,7%*	15,6%	33,3%	**0.088**
DNT	*45+/-31*	36+/-17	38+/-24	0.884
ICA distal	-	7,8%	7,4%	1
M1	-	9,4%	37%	**0.005**
M2	-	14,1%	22,2%	0.364
PCA	-	12,5%	11,1%	1
Any HT	*5,1%*	7,4%	22,2%	**0.076**
SITSMOST	*0%*	1,8%	3,7%	1
3.m mRS 0-2	*75,3%*	54,4%	57,7%	0.816
3. m mRS 0-1	*64,2%*	40,4%	53,8%	0.341
3. m mortality	*6%*	8,8%	11,5%	0.701