

University of Colorado Anschutz Medical Campus

Management of Symptomatic Intraluminal Thrombus of The Internal Carotid Artery

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Introduction		Results	
•	Intraluminal thrombus of the internal carotid artery (IT-ICA) is an infrequent finding in acute ischemic stroke (AIS)	Male, n (%)	23 (62.2%)
•	Nonocclusive thrombi are often found incidentally on angiographic studies increasing the risk of recurrent AIS and Large Vessel Occlusion	Age, (IQR)	59.4 (46.5 - 71.5)
•	Treatment varies, and guidelines have yet to be established. We aimed to describe the variation in the treatments and evaluate for differences in recurrent stroke and intracerebral hemorrhage across treatment groups	Ethnicity White n (%)	27 (73.0%)
	Methods	Hispanic n (%)	1 (2.7%)
	A database of 1495 serves outing CTs. MPA and DCA was seened	African American n (%)	9 (24.3%),
•	retrospectively between September 1, 2011, and DSA was created	Other n (%)	1, (2.7%)
•	Radiology reports were queried for keywords including intraluminal, floating, clot, thrombus or filling defect. We identified cases of intraluminal	NIHSS, baseline mean (IQR)	10.5 (1 - 9)
	thrombus of the extracranial ICA in patients over the age of 18.	Risk Factors	
•	Demographics, clinical features, and imaging characteristics were reviewed	Hypertension n (%)	26, (70.3%)
	Results	Hyperlipidemia n (%)	12, (32.4%)
		Diabetes n (%)	6, (16.2%)
Of	84 radiology reports with intraluminal thrombus	Smoking n (%)	13, (35.1%)
	 37 patients (44%) had IT-ICA and AIS 	Degree of Stenosis	
	• Mean age 59 years; (IQR) $46.5 - 71.5$ • Median NUH Stroke Scale was 10 5 (IQR 1 $- 9$)	Mild	9, (24.3%)
	• Median Min Stroke Scale was 10.5 (IQK 1 - 7)	Moderate	7, (19.4%)
	 8 (21.6%) patients received IV-tPA alone 10 (27%) had LVO and underwent mechanical thrombectomy. 	Severe	17, (45.9%)
	• Severe ICA stenosis (By NASCET criteria) was observed in 17 (46%)		
	 patients 11 (29 7%) had CEA 	IV tPA administered n (%)	8 (21.6%)
	 3 (8%) ICA stenting. 	Mechanical Thrombectomy	10 (27 %)
Modified Rankin Scale		IA tPA	2 (5.4%)





Conclusions

- Most patients with IT-ICA and AIS were treated with anticoagulation and antiplatelet therapy
- More than 10% of patients had recurrent AIS, and 16% had complications of ICH.
- The best treatment strategy to prevent recurrent AIS and minimize hemorrhagic transformation remains unclear.
- Multicenter prospective studies are needed to evaluate optimal timing of CEA and safety and efficacy of medical management.

CEA		11 (29.7%)
CAS		3 (8.1 %)
Medications	Home treatment	In Hospital
Aspirin n (%)	7 (18.9%)	30 (81.1%)
Clopidogrel n (%)	2 (5.4%)	12 (32.4%)
Warfarin n (%)	4 (10.8%)	16 (43.2%)
Heparin n (%)	0	28 (75.7%)
LMWH n (%)	0	8 (21.6%)

- Four patients had recurrent AIS during hospitalization
- Of the 8 patients who developed ICH
 - 6 were treated with anticoagulation
 - 6 (16.2%) did have a carotid intervention
- There was no statistically significant difference in the rate of ICH or recurrent AIS between the treatment groups.

References

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