#### EMERGENT STENTING AFTER IV RT-PA IN ACUTE ISCHEMIC STROKE: EFFICACY AND SAFETY OF LOADING DOSE OF ANTIPLATELETS

<sup>1</sup>LAURA FILIPPI, <sup>1</sup>C. FINOCCHI, <sup>1</sup>M. BALESTRINO, <sup>2</sup>N. MAVILIO, <sup>2</sup>L. CASTELLAN, <sup>1</sup>M. BANDETTINI DI POGGIO <sup>1</sup>POLICLINIC SAN MARTINO HOSPITAL, DEPARTMENT OF NEUROSCIENCE, REHABILITATION, OPHTHALMOLOGY, GENETICS, MATERNAL AND CHILD HEALTH (DINOGMI) – UNIVERSITY OF GENOA AND NEUROLOGY CLINICS -GENOA, ITALY <sup>2</sup>UNIT OF NEURORADIOLOGY - POLICLINIC SAN MARTINO HOSPITAL -GENOA, ITALY







OSPEDALE POLICLINICO SAN MARTINO

Sistema Sanitario Regione Liguria Istituto di Ricovero e Cura a Carattere Scientifico

Acute tandem occlusions of the cervical internal carotid artery and an intracranial large vessel lead to the 10-20% of all acute ischemic stroke (AIS) and present treatment challenges.

It is well known that a loading dose of antiplatelet could reduce in-stent thrombosis, although this treatment is not recommended within 24 h after IV rt-PA (AHA and SPREAD guidelines).



The lack of optimal management strategies of implanted stents and of follow-up data on stent patency encouraged us to review the literature and to formulate an operative protocol for the management of emergent stenting in AIS.

#### ORIGINAL RESEARCH INTERVENTIONAL Predictors and Clinical Impact of Delayed Stent Thrombosis after Thrombectomy for Acute Stroke with Tandem Lesions cervical sten OR. Pop, OI. Zinchenko, OV. Quenardelle, OD. Mihoc, OM. Manisor, OJ.S. Richter, OF. Severac, OM. Simu, OS. Chibbaro, partial/complete O. Rouyer, OV. Wolff, and R. Beaujeux recanalisation **3** Received aspirin and clopidogrel (3/34 8,8%) 14/73 (19,1%) stent occlusion 73 thrombectomi implanted and **11** Received aspirin alone (11/39 28,2%) outcome at discharge<sup>a</sup>

**BACKGROUND AND AIM** 

Predictors	OR (95% CI)	Value
Delayed stent thrombosis		
Admission NIHSS (per 1-point increase)	1.1 (1.01–1.28)	.03
Diabetes	6.07 (1.2-30.6)	.02
In-stent thrombus on final angiographic run	6.2 (1.4-27.97)	.01
Unfavorable clinical outcome at discharge (mRS > 2) <sup>b</sup>		
Delayed stent thrombosis	19.78 (2.78-296.83)	.001
Admission NIHSS (per 1-point increase)	1.27 (1.12-1.51)	<.001
Symptomatic hemorrhagic transformation	23.65 (1.85-3478.94)	.012

Multivariable regression analysis of predictors for delayed stent thrombosis and clinical

#### Emergent Loading Dose of Antiplatelets for Stenting after IV rt-PA in Acute Ischemic Stroke: A Feasibility Study

Yun-Fei Han, Qi-Liang Dai, Xiang-Liang Chen, Yun-Yun Xiong, Qin-Yin, Ge-Lin Xu, Wu-Sheng Zhu, Ren-Liang Zhang, Min-Min Ma, Wen-Hua Liu & Xin-Feng Liu

To cite this article: Yun-Fei Han, Qi-Liang Dai, Xiang-Liang Chen, Yun-Yun Xiong, Qin-Yin, Ge-Lin Xu, Wu-Sheng Zhu, Ren-Liang Zhang, Min-Min Ma, Wen-Hua Liu & Xin-Feng Liu (2017): Emergent Loading Dose of Antiplatelets for Stenting after IV rt-PA in Acute Ischemic Stroke: A Feasibility Study, International Journal of Neuroscience, DOI: <u>10.1080/00207454.2017.1367295</u>

To link to this article: <u>http://dx.doi.org/10.1080/00207454.2017.1367295</u>

This pilot study preliminary showed that emergent loading dose of antiplatelets for stenting after IV rt-PA in acute ischemic stroke did not significantly increase the incidence of HT.

## HAT SCORE

HAT is a validated easy-to-perform scale able to predict the risk of ICH and prognosis after treatment with IV rt-PA and it has been previously established that a score  $\leq 2$  is linked to a reasonable risk of ICH.

#### HAT score: hemorrhage after thrombolysis score Characteristic **Points** History of diabetes mellitus or baseline blood glucose> 200 mg/dL upon admission No 0 Yes 1 Pretreatment NIHSS score <15 0 15-20 1 ≥ 20 2 Presence of easily visible hypodensity on initial head CT scan No 0 < 1/3 of MCA territory 1 ≥1/3 of MCA territory 2

The aim of our work is to shed new light on the appropriate management in acute setting of stents implantation in AIS, thus defining a protocol in order to identify patients at high and low risk of bleeding.

# **PROTOCOL DESIGN**

Acute Ischemic Stroke (AIS patients) with cervical or vertebrobasilar stent implantation

Iv rt-PA followed by acute stenting placement	HAT score ≤ 2	Immediately administration of loading dose of antiplatelets (Lysine Acetilsalicilate 500mg and clopidogrel 300 mg)
	HAT score > 2	Immediately administration of Lysine Acetilsalicilate 500 mg. Loading dose of Clopidogrel 300 mg after 24 hours
Acute stenting placement without IV	Immediately administration of loading dose of antiplatelets	

rt\_PA

administration of loading dose of antiplatelets (Lysine Acetilsalicilate 500mg and clopidogrel 300 mg)

# **PROTOCOL DESIGN**

The stent patency will be monitorated after 24 hours, 1 and 3 months by ecocolordoppler or angioCT and occurrence of ICH by cerebral CT within 24–36 h after treatment. Functional outcome will be assessed at 90 days by the modified Rankin Scale (mRS).

## **DISCUSSION AND CONCLUSIONS**

This is a prospective multicenter protocol, coordinated by the San Martino Policlinic-University of Genoa.

The study started in May 2019 and it is open to other HUB centers potentially interested.

The aim of our study is to implement evidence on the safety and efficacy of a loading dose of antiplatelets after emergent stenting placement in patients with AIS treated with rt-PA.

# Grazie per l'attenzione