



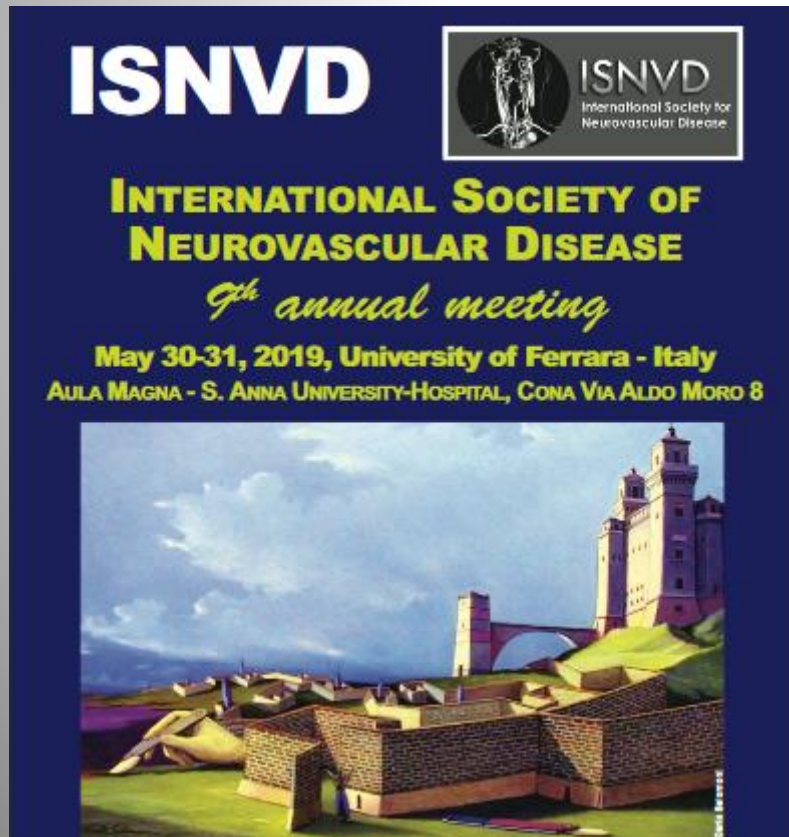
SAPIENZA
UNIVERSITÀ DI ROMA



SISTEMA SANITARIO REGIONALE

**AZIENDA OSPEDALIERO-UNIVERSITARIA
SANT'ANDREA**

TIMING AND RESULTS OF CEA IN ACUTE SETTING



**AZIENDA OSPEDALIERO-UNIVERSITARIA SANT'ANDREA
FACOLTA' DI MEDICINA E PSICOLOGIA
DIPARTIMENTO DI MEDICINA CLINICA E MOLECOLARE
UOC Chirurgia Vascolare
Direttore Prof. Maurizio Taurino**

No disclosures



3. Patologia carotidea

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F. NAVARRETTA⁵, R. PULLI⁶, S. RICCI⁷, E. SBARIGIA⁸

Raccomandazione 3.12

L'endarterectomia, con documentato rischio perioperatorio di morte e ogni tipo di ictus non superiore a 6%, è indicata nella stenosi carotidea sintomatica tra 70 e 99% NASCET.

Classe I, Livello di evidenza A

Raccomandazione 3.14

La rivascolarizzazione carotidea è indicata entro 15 giorni dal sintomo ischemico. è presumibile che il massimo beneficio si abbia se la rivascolarizzazione si effettua entro 2-3 giorni dal sintomo ischemico.

Classe I, Livello di evidenza A



Eur J Vasc Endovasc Surg (2018) 55, 3–81

Editor's Choice — Management of Atherosclerotic Carotid and Vertebral Artery Disease: 2017 Clinical Practice Guidelines of the European Society for Vascular Surgery (ESVS)

Recommendation 35	Class	Level
Carotid endarterectomy is recommended in patients reporting carotid territory symptoms within the preceding 6 months and who have a 70–99% carotid stenosis, provided the documented procedural death/stroke rate is <6%	I	A
Recommendation 36		
Carotid endarterectomy should be considered in patients reporting carotid territory symptoms within the preceding 6 months and who have a 50–69% carotid stenosis, provided the documented procedural death/stroke rate is <6%	Ila	A

Recommendation 40	Class	Level
When revascularisation is considered appropriate in symptomatic patients with 50–99% stenoses, it is recommended that this be performed as soon as possible, preferably within 14 days of symptom onset	I	A

J Cardiovasc Surg (Torino), 2015 Dec;56(6):845-52. Epub 2015 Sep 24.

Stroke risk in the early period after carotid related symptoms: a systematic review.

Tsantilas P¹, Kühnl A, Kallmayer M, Knappich C, Schmid S, Kuetchou A, Zimmermann A, Eckstein HH.

Tsantilas P, Kühnl A, Kallmayer M, Knappich C, Schmid S, Kuetchou A, Zimmermann A, Eckstein HH.

Patients with symptomatic carotid stenosis are at a very high risk of a definitive stroke

In the first 2-3 days

→

6,4%

In the first 7 days

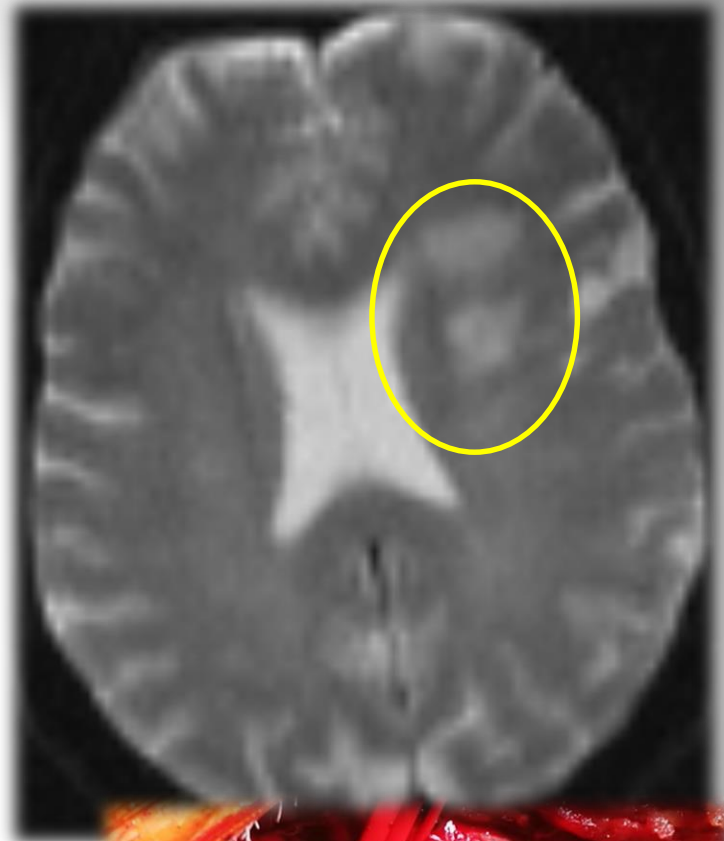
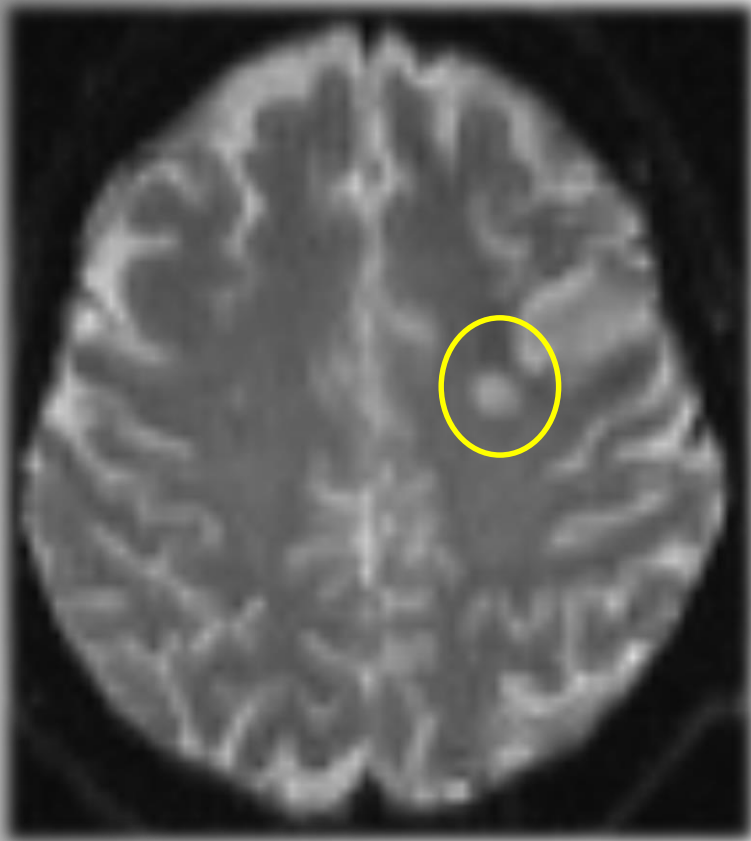
→

20%

In the first 14 days →

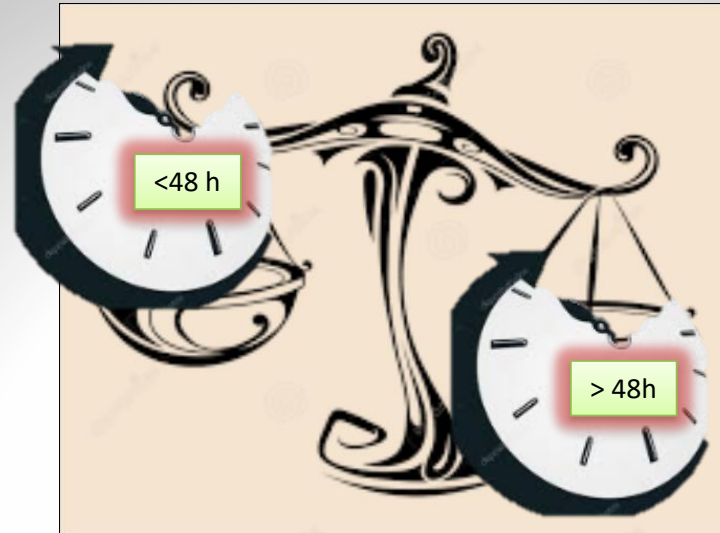
26%





?





THE OPTIMUM TIMING OF CAROTID INTERVENTION FOR SYMPTOMATIC CAROTID STENOSIS

STILL REMAINS NOT ENTIRELY DETERMINED



REVIEW

Systematic Review and Meta-Analysis of Very Urgent Carotid Intervention for Symptomatic Carotid Disease

David Milgrom ^{a,i}, Shahin Hajibandeh ^{b,i}, Shahab Hajibandeh ^b, Stavros A. Antoniou ^c, Francesco Torella ^a, George A. Antoniou ^{b,d,*}

12 Observational studies, 1 RCT

5751 *carotid revascularization*

Primary outcomes

- Ipsilateral stroke
- Death

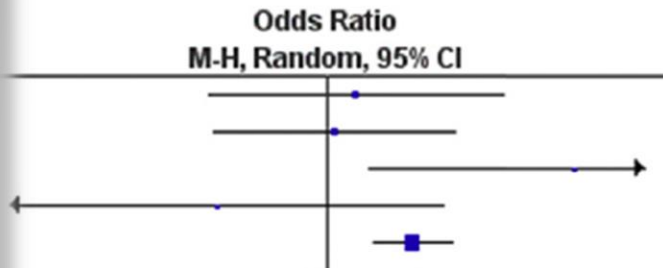
Secondary outcomes

- TIA
- Myocardial infarction

REVIEW

Systematic Review and Meta-Analysis of Very Urgent Carotid Intervention for Symptomatic Carotid Disease

David Milgrom ^{a,†}, Shahin Hajibandeh ^{b,†}, Shahab Hajibandeh ^b, Stavros A. Antoniou ^c, Francesco Torella ^a, George A. Antoniou ^{b,d,*}

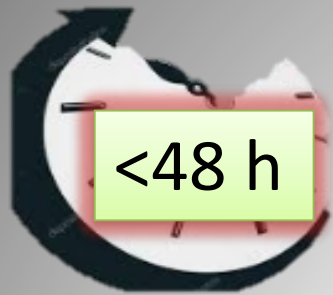


STROKE

It was found that very urgent carotid intervention is significantly associated with increased risk of stroke. This risk needs to be considered when offering patients surgery in the very urgent time period. Whether this risk is significantly higher than the risk of recurrent stroke without surgery in the crucial acute period remains to be established. Further studies, in particular high quality multicentre prospective longitudinal studies or RCTs, are needed.

= 12%

0.01
Favo

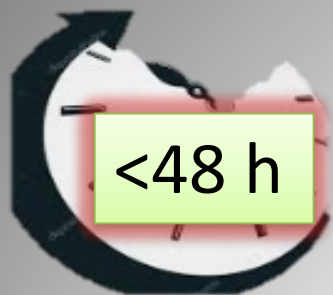


A short time interval between the neurologic index event and carotid endarterectomy is not a risk factor for carotid surgery

Pavlos Tsantilas, MD,^a Andreas Kühnl, MD,^a Michael Kallmayer, MD,^a Jaroslav Pelisek, PhD,^a Holger Poppert, MD,^b Sofie Schmid, MD,^a Alexander Zimmermann, MD,^a and Hans-Henning Eckstein, PhD,^a *Munich, Germany*

Complication	Total, No. (%)	Interval between index event and surgery				P value ^a
		0-2 days, No. (%)	3-7 days, No. (%)	8-14 days, No. (%)	15-180 days, No. (%)	
Stroke/mortality rate	10 (2.5)	2 (3)	3 (3)	1 (2)	4 (2)	.93
Stroke rate	6 (1.5)	0	2 (2)	1 (2)	3 (2)	1.0
Minor stroke (mRS 0-2)	3 (0.7)	0	1 (1)	0	2 (1)	.70
Major stroke (mRS 3-5)	3 (0.7)	0	1 (1)	1 (2)	1 (1)	.87
Mortality rate	4 (1.0)	2 (3)	1 (1)	0 (0)	1 (1)	.24
Noncerebral complications						
Myocardial infarction	3 (0.7)	1 (2)	1 (1)	0	1 (1)	.74
Major neck bleeding ^b	7 (1.7)	1 (2)	1 (1)	0	5 (3)	.37
Cranial nerve injuries ^c	9 (2.2)	3 (5)	2 (2)	2 (3)	2 (1)	.36

Conclusions: The combined mortality and stroke rate was 2.5% and did not differ significantly between the four different time interval groups. CEA was safe in our cohort, even when performed as soon as possible after the index event. (J Vasc Surg 2017;65:12-20.)



Urgent carotid endarterectomy to prevent recurrence and improve neurologic outcome in mild-to-moderate acute neurologic events

Laura Capoccia, MD,^a Enrico Sbarigia, MD,^a Francesco Speziale, MD,^a Danilo Toni, MD,^b and Paolo Fiorani, MD,^a *Rome, Italy*

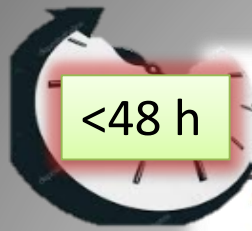
Urgent Carotid Surgery: Is It Still out of Debate?

C. Battocchio, C. Fantozzi, L. Rizzo, F. Persiani, S. Raffa, and M. Taurino

Azienda Ospedaliera Sant'Andrea, Facoltà di Medicina e Psicologia, Sapienza-Università di Roma, 00189 Roma, Italy

	NIHSS		
	At admission	Postoperative	P value*
Surgical group	7.4	5.5	0.21

In conclusion, our study demonstrated that early treatment with CEA or protected carotid stenting is both feasible and safe in selected patients with first episode or recurrent



<48 h

Original Article

The different scenarios of urgent carotid revascularization for crescendo and single transient ischemic attack

Urgent CEA in patients with recent/crescendo TIA provided, in our experience, excellent results, with low rates of perioperative and late stroke. In selected patients with

	(n: 365)	(n: 150)	P
Stroke	1.6 (6)	5.3 (8)	.02
Death	0.5 (2)	2.0 (3)	.12
Stroke/death	2.2 (8)	6.0 (9)	.03

	<48 hrs (n: 87)	>48 hrs (n: 63)	P
Stroke	1.1 (1)	11.1 (7)	.01
Death	1 (1.1)	3.2 (2)	.57
Stroke/death	2.3 (2)	11.1 (7)	.03

according timing of
t ischemic attack.

- ✓ CAREFUL PATIENTS' SELECTION
- ✓ CLOSE COLLABORATION OF DIFFERENT SPECIALISTS
(NEUROLOGISTS, NEURORADIOLOGISTS AND VASCULAR SURGEONS)



TO REDUCE THE INCIDENCE AND THE SEVERITY OF EARLY AND LATE COMPLICATIONS



OUR EXPERIENCE

RETROSPECTIVE ANALYSIS

From January 2010 to February 2019

**128 Carotid revascularization
in symptomatic patients**

Urgent revascularization
<48 h

42

40 CEA
2 CAS

Delayed revascularization
>48 h <14 days

86

76 CEA
10 CAS



OUR EXPERIENCE

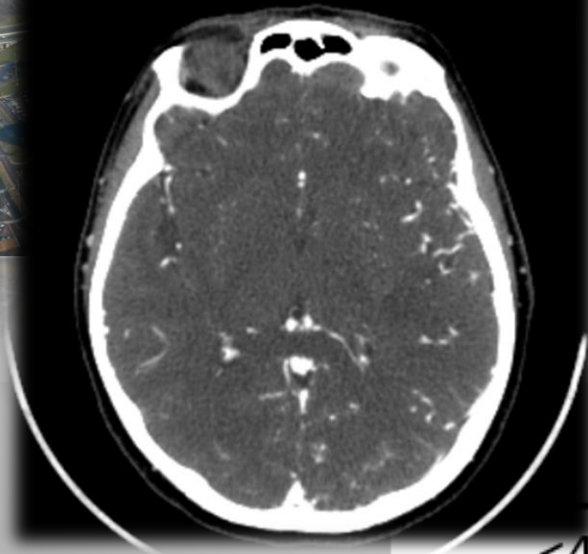
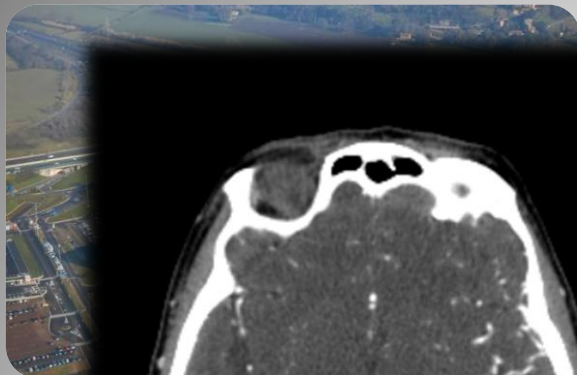
From January 2010 to February 2019

**128 Carotid revascularization
in symptomatic patients**

demographic characteristics

	<48h	>48h	p
Hypertension	34 (80%)	73 (85%)	0.6
Hyperlipidemia	26 (62%)	55 (64%)	0.82
Diabetes	10 (24%)	31 (36%)	0.16
Smoking	27 (64%)	55 (64%)	0.9
COPD	10 (24%)	18 (21%)	0.7
Mean age	71,6	72,6	
Males	29	56	
Cardiovascular events	8 (19%)	38 (44%)	0.005

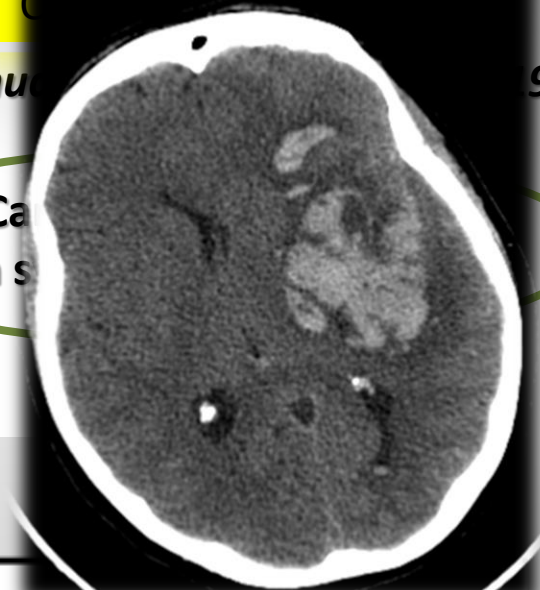
n.s



<48h

From January

128 Cases
in s



>48h

p



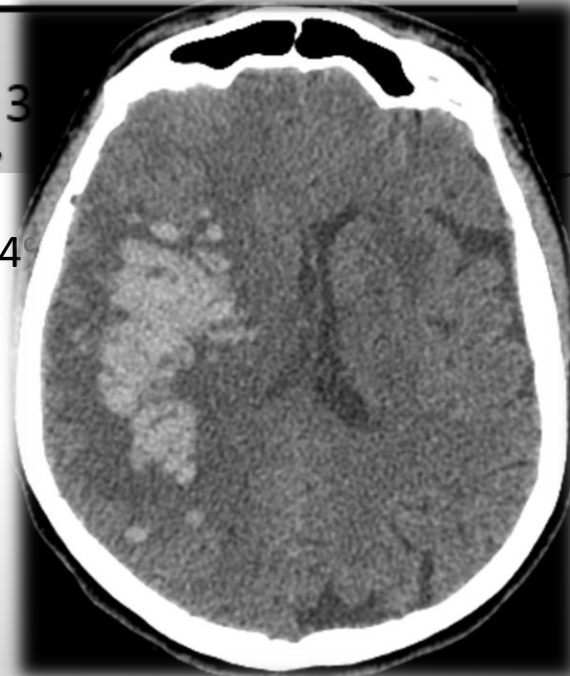
4 (9,5%)

parenchymal hemorrhage

(31%)



21(24,4%)



TIMING AND RESULTS OF CEA IN ACUTE SETTING

CONCLUSION

- ✓ The optimum timing of carotid intervention for symptomatic carotid stenosis is not entirely established
- ✓ Close **collaboration** between **neurologists, neuroradiologists and vascular surgeons** is mandatory to select patients who could benefit most from carotid revascularization in emergency
- ✓ Further studies are needed

Thank you...
for your attention

