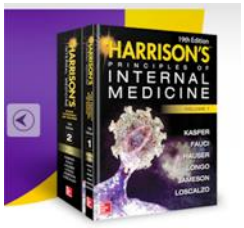
STROK YENİ YAKLAŞIMLAR

Adnan Menderes Universitesi Acil Tıp AD.

Yrd.Doç.Dr.Mücahit Avcil

- “Serabrovasküler hastalıkların çoğunda nörolojik kayıp aniden başlar, ‘Allah’ın tokatını yemiş’ gibidir”
-



Önemine kısa bir vurgu

- SVO lar ölüm nedeni olarak 3.(artık 4), sakatlık oluşturma yönünden 1. sıradadırlar.

- Hayatta kalabilen hastaların ise ancak küçük bir bölümü kendine yetecek düzeyde bir canlılığa sahip olabilmektedir.

Aklımıza takılan soru(n)lar

- SVO sonrası rehabilitasyon ne kadar yararlı?
- SVO hasarı önlemek için yeni tedaviler var mı?
- Girişimsel tedaviler ne kadar ekili, ne kadar ulaşılır, gelecekte rt-PA nın yerini alır mı?(MI gibi)
- Hastaya ilk BT mi MR mı?

- Dünya ve ülkemizde; strok'da trombolitik vermekten çekindik mi? Geri mi kaldık?
  - MI da kardiologlar korkmadan verirken nörologlar ile bunu müzakere etmemiz gerekebiliyor.

Aklımıza takılan soru(n)lar

- Enfektif endokardit ve intrakardiak trombus varsa trombolitik uygulaması doğru mu?
  - Her hastaya hızla eko yapmak mümkün mü- etkin mi?

Aklımıza takılan soru(n)lar

- Konvansiyonel tedavi alacaksa hangisi daha iyi?
  - Aspirin
  - Heparin? DMAH

Aklımıza takılan soru(n)lar

- Algoritmalar-triaj nasıl olacak..
- Fluktuasyon gösteren hastalarda yaklaşım nasıl olacak?
- Hastanın önceki merkezde-acilde- aspirin, heparin-rt-PA alması şu anki tedaviyi nasıl etkiler

Aklımıza takılan soru(n)lar

- Mekanik endovasküler tedavilerde;
  - Önceki stroke
  - Ağır kafa travması
  - Koagulasyon bozukluğu
  - Antikoagulan tedavi alma

durumları varsa nasıl bir yol izlenir..

Aklımıza takılan soru(n)lar

- Mekanik endovasküler tedaviler hafif strok larda mı daha iyi olur, ağır tablolarda mı?

Dünya bunları konuşuyor..

- IV trombolitik tedaviler!!!
- Penumbrayı kurtarmak
- Intraarteriyel mi yapalım?

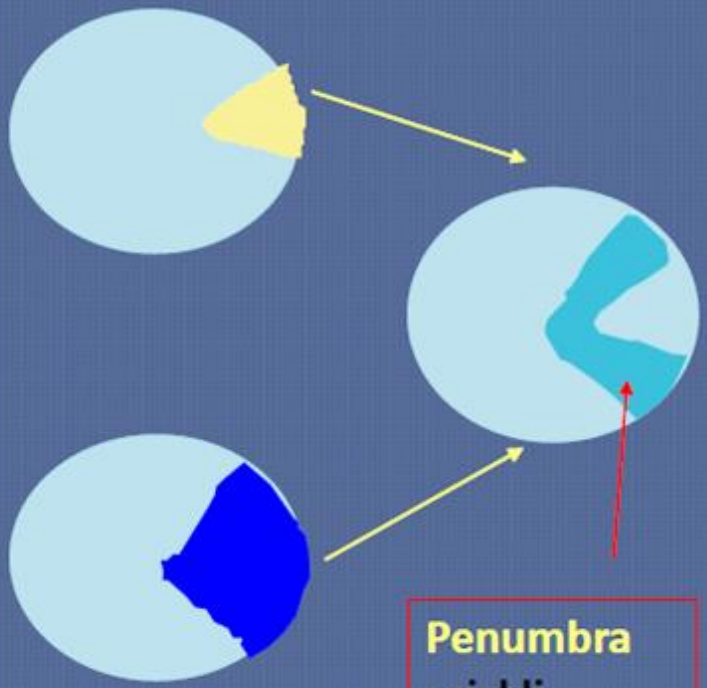
- Mekanik trombektomi-ulaşılabilir mi? Etkin mi?Hangi cihaz daha üstün?

- Yolda-ambulansta trombolitik verilmesi!
- İnme merkezleri, faydası, organizasyonu!
- I.V trombolitik etkinliğini artıracak bir şey var mı?(Transkraniyel dopler -belli frekansta- uygulaması etkinliği artırıyor)

I.V trombolitik uygulamasında zaman sıkışıklığı nasıl aşılır..

İskemik Penumbra

DWI- İnfarkt Çekirdeği



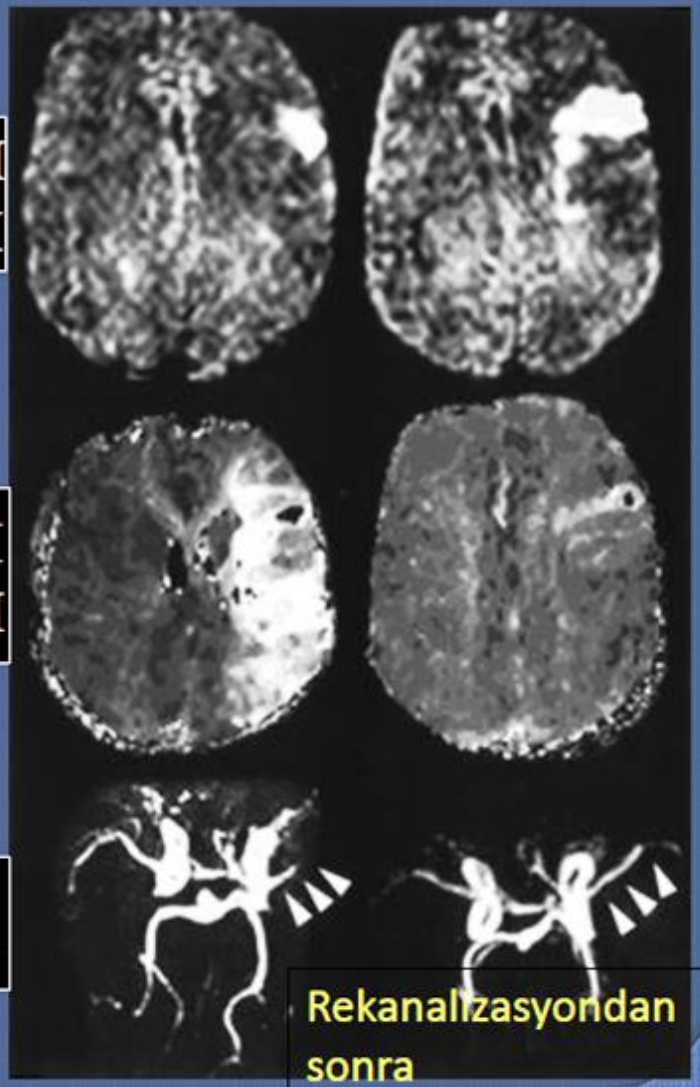
Bozulmuş Perfüzyon PWI

Penumbra =riskli, kurtulabilir doku

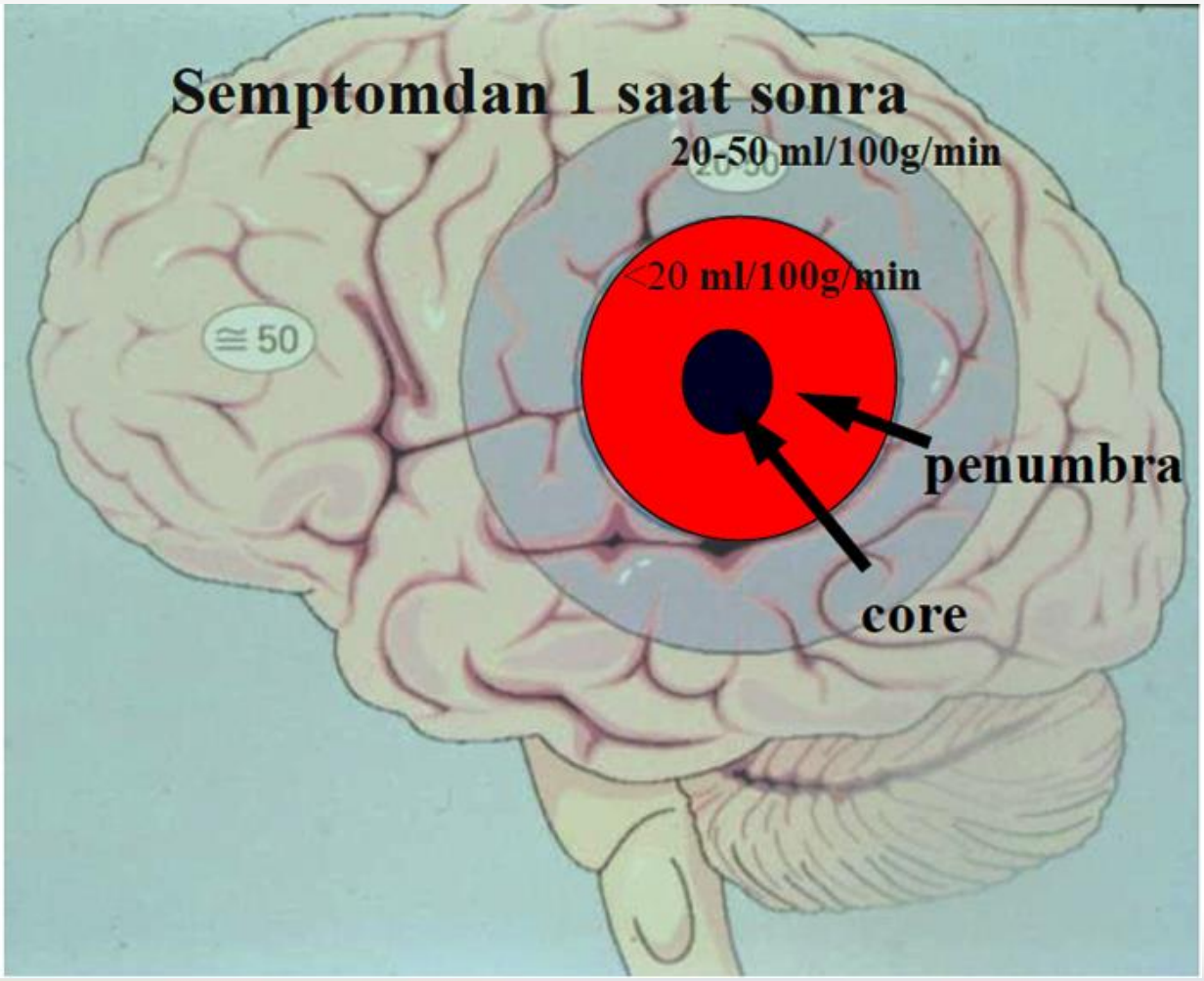
DWI MRI

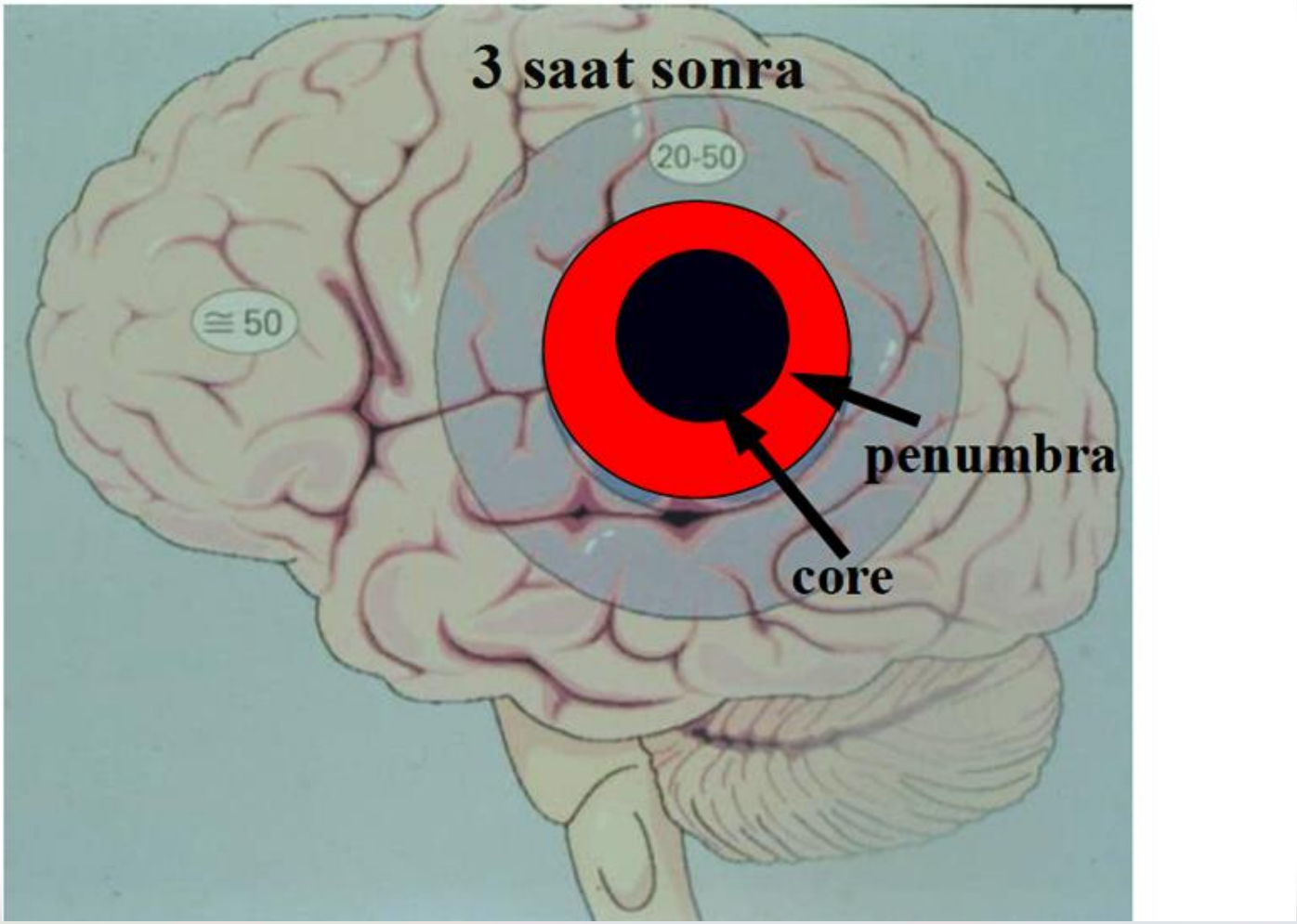
PWI MRI

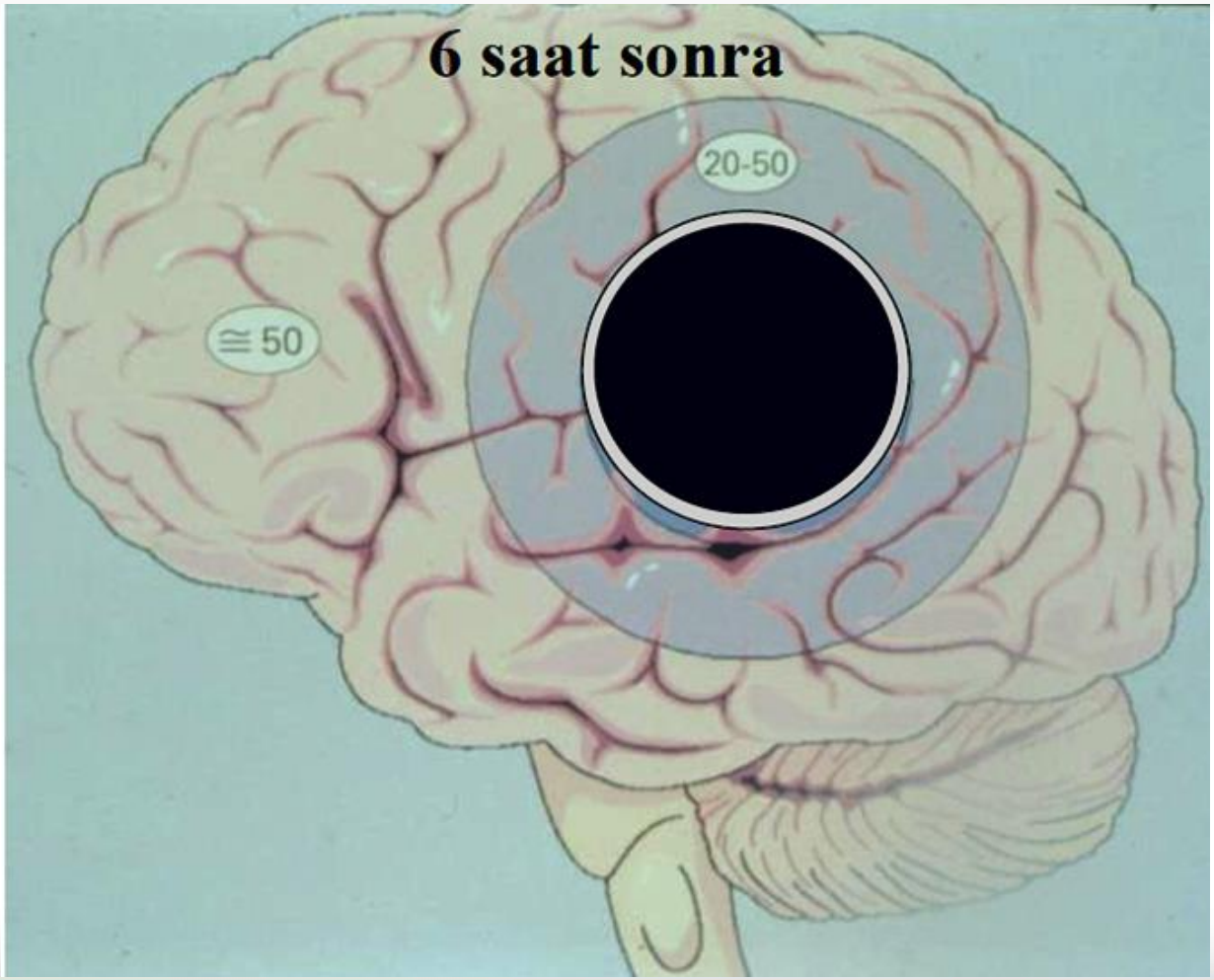
MRA



Rekanalizasyondan sonra


Semptomdan 1 saat sonra
20-50 ml/100g/min
<20 ml/100g/min
≅50
penumbra
core





AHA/ASA Guideline

Guidelines for the Early Management of Patients With Acute Ischemic Stroke

A Guideline for Healthcare Professionals From the American Heart Association/American Stroke Association

The American Academy of Neurology affirms the value of this guideline as an educational tool for neurologists.

Endorsed by the American Association of Neurological Surgeons and Congress of Neurological Surgeons

Edward C. Jauch, MD, MS, FAHA, Chair; Jeffrey L. Saver, MD, FAHA, Vice Chair; Harold P. Adams, Jr, MD, FAHA; Askiel Bruno, MD, MS; J.J. (Buddy) Connors, MD; Bart M. Demaerschalk, MD, MSc; Pooja Khatri, MD, MSc, FAHA; Paul W. McMullan, Jr, MD, FAHA; Adnan I. Qureshi, MD, FAHA; Kenneth Rosenfield, MD, FAHA; Phillip A. Scott, MD, FAHA;

DOI: 10.1161/STR.0000000000000074

AHA/ASA Guideline

2015 AHA/ASA Focused Update of the 2013 Guidelines for the Early Management of Patients With Acute Ischemic Stroke Regarding Endovascular Treatment

A Guideline for Healthcare Professionals From the American Heart Association/American Stroke Association

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Endorsed by the American Association of Neurological Surgeons (AANS); Congress of Neurological Surgeons (CNS); AANS/CNS Cerebrovascular Section; American Society of Neuroradiology; and Society of Vascular and Interventional Neurology

Klavuza Esas Teşkil Eden Çalışmalar

- Intra-arterial Versus Systemic Thrombolysis for Acute Ischemic
- Stroke(SYNTHESIS)

- The Interventional Management of Stroke Trial III (IMS III)

- MR and Recanalization of Stroke Clots Using Embolectomy (MR RESCUE)

Klavuza Esas Teşkil Eden Çalışmalar

- The Multicenter Randomized Clinical Trial of Endovascular Treatment for Acute Ischemic Stroke (MR CLEAN)
- The Endovascular Treatment for Small Core and Anterior Circulation Proximal Occlusion with Emphasis on Minimizing CT to Recanalization Times (ESCAPE)
- Solitaire FR with the Intention for Thrombectomy as Primary Endovascular Treatment of Acute Ischemic Stroke (SWIFT PRIME)
- The Extending the Time for Thrombolysis in Emergency Neurological Deficits-Intra-Arterial (EXTEND-IA)
- Endovascular Revascularization With Solitaire Device Versus Best Medical Therapy in Anterior Circulation Stroke Within 8 Hours REVASCAT

	n	TICI 2B/3	Mrs 0-2 at 90 Active/cont %	Death at 90 d
SYNTHESIS Expansion	181/181		41.9/ 46.4	14.4 /9.9
IMS III	434/222	41	40.8/ 38.7	19.1/ 21.6
MR RESCUE	65/54	25	19 /20	19/ 24
MR CLEAN	233/267	58,7	32.6 /19.1	21 /22
ESCAPE	165/150	72,4	53/ 29.3	10.4 /19
SWIFT PRIME	98/98	88	60 /35	9 /12
EXTEND-IA	35/35	86	71 /40	9 /20
REVASCAT	103/103	66	44/ 28	18/ 16

Öneriler

1. Hasta, IV tedavi için uygunsa, endovasküler tedaviler düşünülüyorsa bile IV rt-PA almalıdır.(class I; LOE A)
2. Eğer aşağıdaki kriterlerin hepsini karşılıyorsa hasta stent pıhtı tutucular (stent retriever) tedavisi almalıdır (clas I; LOE A)

- (a) prestroke mRS score 0 to 1,
- (b) acute ischemic stroke receiving intravenous r-tPA within 4.5 hours of onset
- according to guidelines from professional medical societies,
- (c) causative occlusion of the internal carotid artery or proximal MCA (M1),
- (d) age ≥18 years,
- (e) NIHSS score of ≥6,
- (f) ASPECTS of ≥6, and
- (g) treatment can be initiated (groin puncture) within 6 hours of symptom onset
- Köprü mRS

3. Olaydan sonra damar ne kadar çabuk açılırsa sonuçlar o kadar iyidir- gerek rt-PA gerekse mekanik (class I; LOE B)

4. Mekanik tedavilerde >6 saatte efektivite belirsizdir (class IIb;LOE C)

5. Anterior sirkulasyon tıkanıklığı olan ve rt-PA contrendike olan vakalar stent pıhtı tutucular ile tedavisinin 6 saat içinde bitirilmesi makuldur. (class Iıa; LOE C)

6. Yararı emin olmamakla birlikte 6 saat içinde şit koyabildiğin M2, M3, ACA, Vertebral, basiller, posterior arter tıkanıklıklarında stent pıhtı tutucular ile tedavi makuldür.(class Iıb; LOE C)

7. Hafif stroke da (mRS>1, ASPECTS<6, NIHSS<6) pıhtı tutucular ile girişim makuldur. (class Iıb; LOE B)

8. rt- PA aldıktan sonra hasta klinik gelişimi gözlemeden mekanik tedavilere alınabilir

(class III; LOE B)

9. Klinik geridönüşün iyi olması için teknik hedef; TICI 2B/3 anjiografik sonuç elde edilmelidir (class I; LOE A)

10. İşlem sırasında bilinçli sedasyon genel anesteziye tercih edilebilir fakat her vaka kendi içinde değerlendirilmelidir.(class Iıb; LOE C)

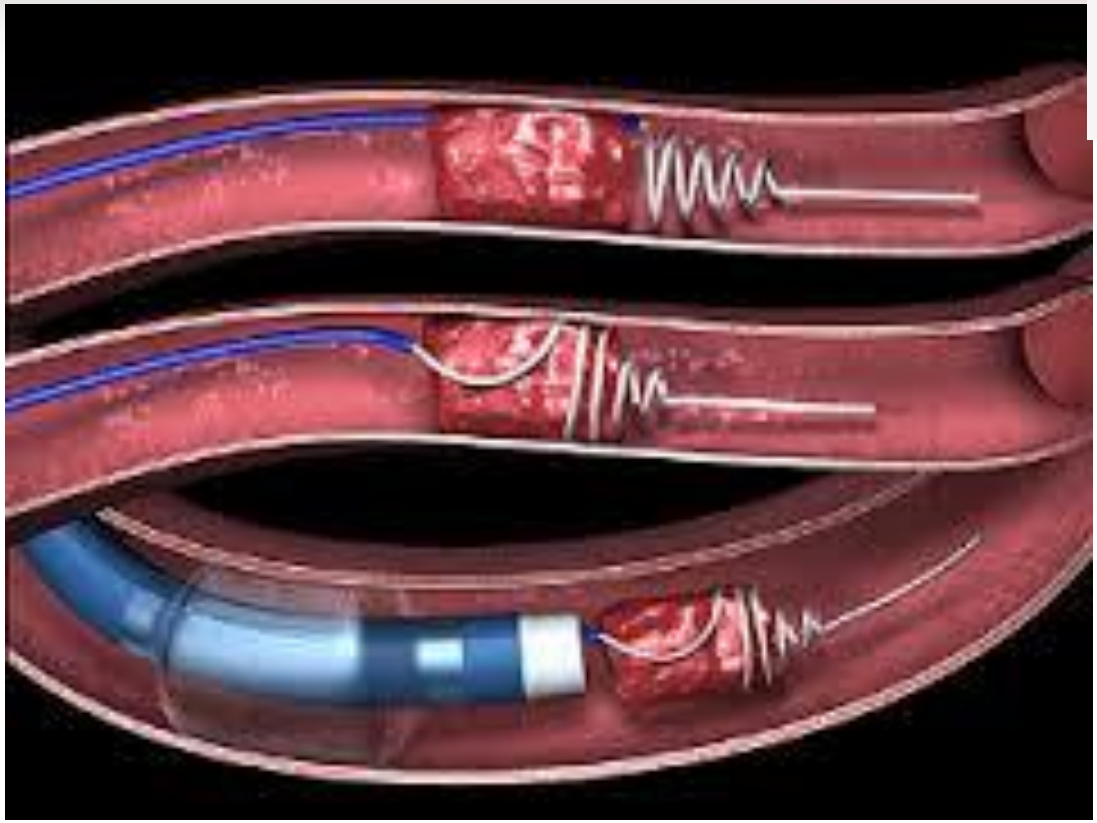
Görüntüleme ile ilgili öneriler

1. Herhangi bir tedavi vermeden önce görüntüleme önerilmektedir ve kontrassız BT yeterlidir.

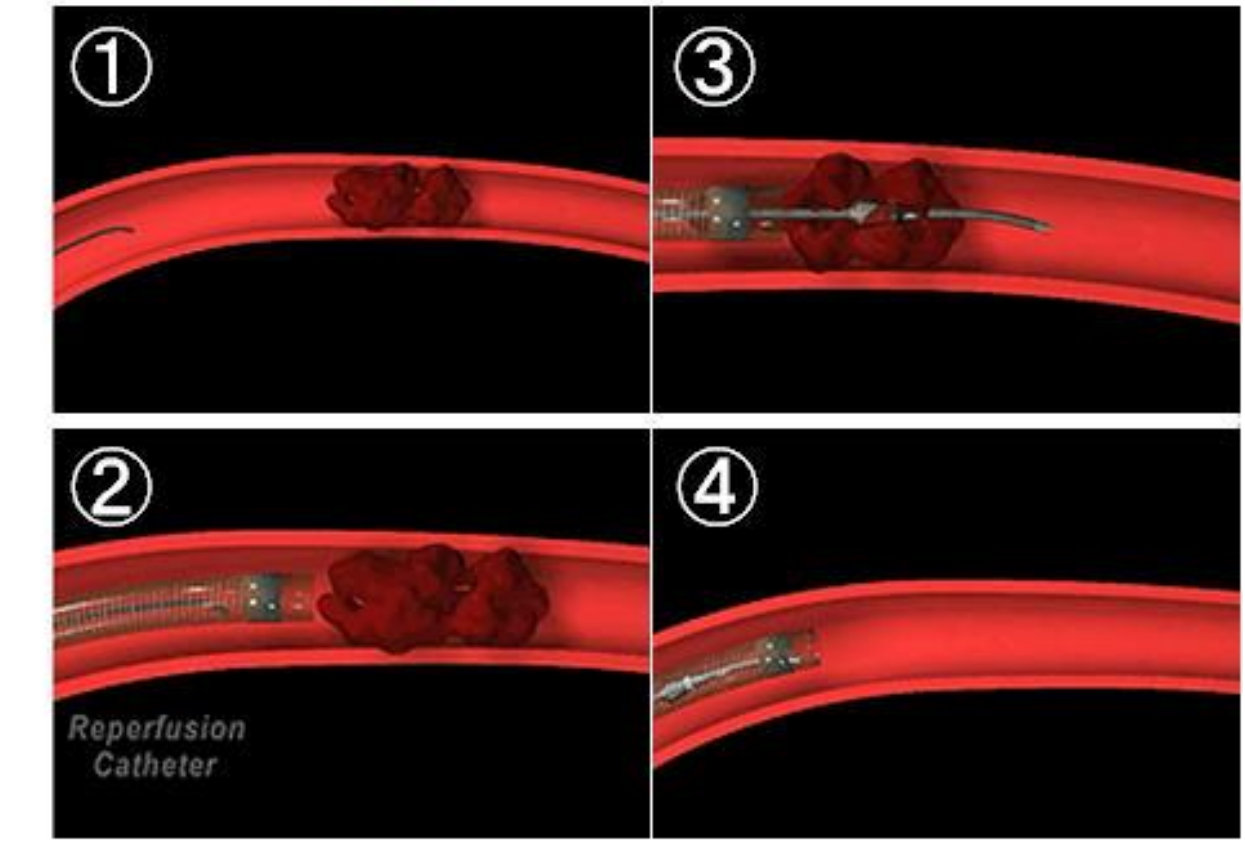
Endovasküler cihazlar

Endovasküler trombektomi	Distal cihazlar: Merci, Preset, Catch, Neuronet,Trevo,Solitaire,Revive Proksimal cihazlar: Snare
Endovasküler tromboaspirasyon	Penumbra, AnjioJet
Mekanik trombüs parçalanması	Mikroguide-wire, snare, anjioplasti
Transkraniyal veya endovasküler aracılı fibrinoliz	TCD, EKOS MicroLysUS
Endovasküler trombüs tuzaklaması	Self-expandable stent, balon-expandable stent
Geçici endovasküler bypass	Closed-cell stentler
Global reperfüzyon	NeuroFlo

Merci device

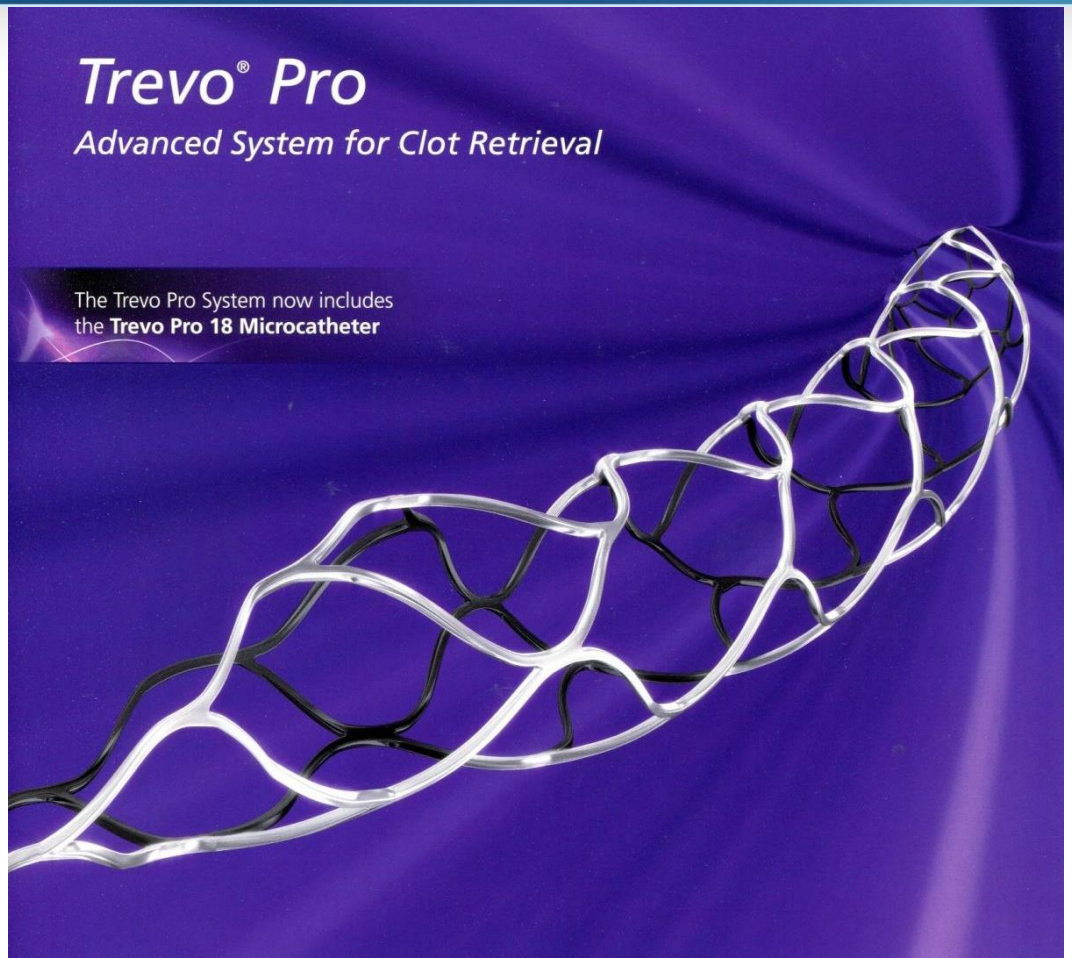


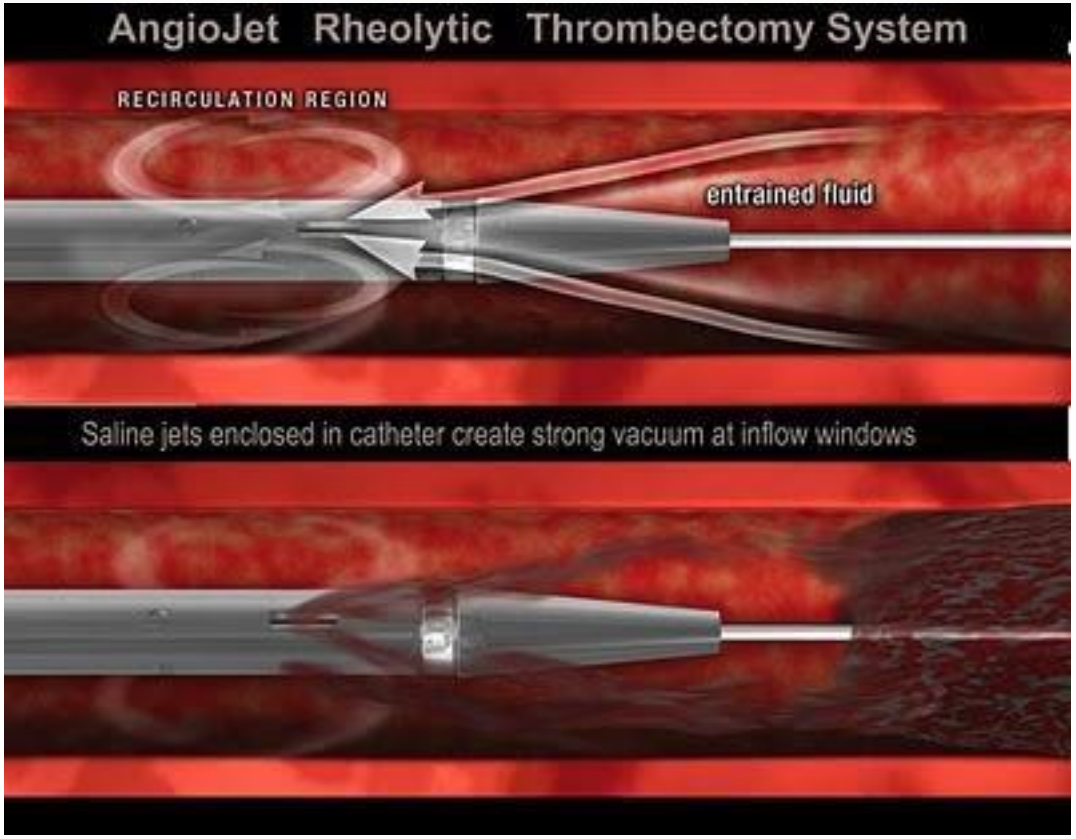
Penumbra



Solitaire

Trevo




AngioJet Rheolytic Thrombectomy System
RECIRCULATION REGION
entrained fluid
Saline jets enclosed in catheter create strong vacuum at inflow windows

- İlk jenarasyon cihazlar
  - MERCİ ve PENUMBRA
- İkinci jenerason cihazlar
  - SOLİTAİRE, TREVO
  - Solitare köprü-video

	MULTİ MERCİ	Penumbra	PROACT	Solitaire	EKOS
Sayı	164	125	121	22	14
Yaş	68	64	64	64	64
Revaskularizasyon %	68	82	66	90	82
Semptomatik ISH %	9.8	11.2	10.9	9	14
Mortalite %	43	32.8	25	18	36
90 gün mRS≤2	36	25	40	50	43

- İlk jenarasyon: Klinik sonuçlarda anlamlı artış yok
- İkinci jenarasyon: Sonuçlar umut verici. Rekanalizasyon oranları %90 (SWİFT ve TREVO çalışmaları)

Generalized Safety and Efficacy of Simplified Intravenous Thrombolysis Treatment (SMART) Criteria in Acute Ischemic Stroke: The MULTI SMART Study

Sigrid B. Sørensen, MD,*† Nobl Barazangi, MD, PhD,*‡§ Charlene Chen, MD,*‡§ Christine Wong, MD,*‡§ David Grosvenor, MPH,*‡‖ Jack Rose, MD,*‡§ Ann Bedenk, RN,*‡§ Megan Morrow, RN,*‡§ Dan McDermott, MD,¶ Jens D. Hove, MD, PhD,†#** and David C. Tong, MD, FAAN, FAHA, FANA*‡§

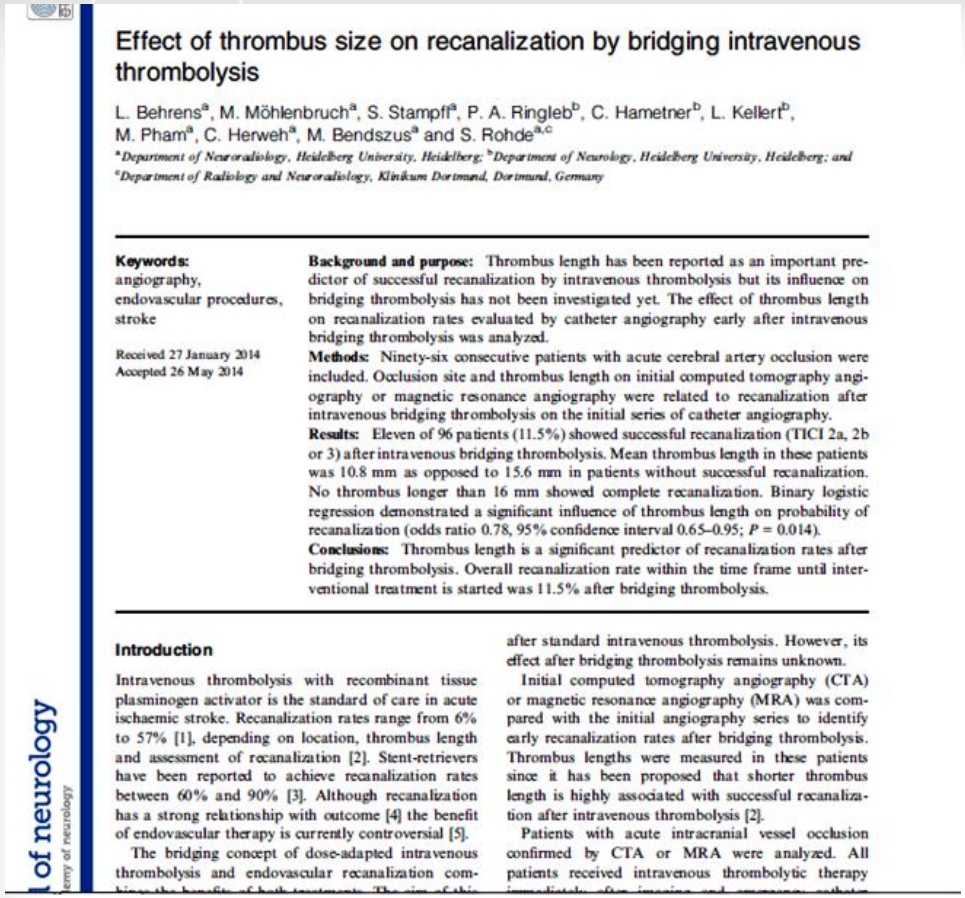
Background: Common intravenous recombinant tissue plasminogen activator (IV rt-PA) exclusion criteria may substantially limit the use of thrombolysis. Preliminary data have shown that the SMART (Simplified Management of Acute stroke using Revised Treatment) criteria greatly expand patient eligibility by reducing thrombolysis exclusions, but they have not been assessed on a large scale. We evaluated the safety and efficacy of general adoption of SMART thrombolysis criteria to a large regional stroke network. *Methods:* Retrospective analysis of consecutive patients who received IV thrombolysis within a regional stroke network was per-

- J Stroke Cerebrovasc Dis. 2016 Feb 18.
- Retrospektif bir çalışma
- Zamanında gelmiş hastaların %25 i sıkı kriterler yüzünde IV terapi alamamakta

- SMART kriterlerinin uygulanması güvenli ve etkindir.

- Mevcut kriterlere göre I.V terapi alamayan pek çok hasta terapiden dışlanmamış olacaktır.
- Smart kriterlerine köprü

STROK İLE İLGİLİ BİRKAÇ YENİ YAKLAŞIM DAHA..



Effect of thrombus size on recanalization by bridging intravenous thrombolysis

L. Behrens[a], M. Möhlenbruch[a], S. Stampfl[a], P. A. Ringleb[b], C. Hametner[b], L. Kellert[b], M. Pham[a], C. Herweh[a], M. Bendszus[a] and S. Rohde[a,c]

[a]Department of Neuroradiology, Heidelberg University, Heidelberg; [b]Department of Neurology, Heidelberg University, Heidelberg; and [c]Department of Radiology and Neuroradiology, Klinikum Dortmund, Dortmund, Germany

Keywords: angiography, endovascular procedures, stroke

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Accepted 26 May 2014

Background and purpose: Thrombus length has been reported as an important predictor of successful recanalization by intravenous thrombolysis but its influence on bridging thrombolysis has not been investigated yet. The effect of thrombus length on recanalization rates evaluated by catheter angiography early after intravenous bridging thrombolysis was analyzed.

Methods: Ninety-six consecutive patients with acute cerebral artery occlusion were included. Occlusion site and thrombus length on initial computed tomography angiography or magnetic resonance angiography were related to recanalization after intravenous bridging thrombolysis on the initial series of catheter angiography.

Results: Eleven of 96 patients (11.5%) showed successful recanalization (TICI 2a, 2b or 3) after intravenous bridging thrombolysis. Mean thrombus length in these patients was 10.8 mm as opposed to 15.6 mm in patients without successful recanalization. No thrombus longer than 16 mm showed complete recanalization. Binary logistic regression demonstrated a significant influence of thrombus length on probability of recanalization (odds ratio 0.78, 95% confidence interval 0.65–0.95; $P = 0.014$).

Conclusions: Thrombus length is a significant predictor of recanalization rates after bridging thrombolysis. Overall recanalization rate within the time frame until interventional treatment is started was 11.5% after bridging thrombolysis.

Introduction

Intravenous thrombolysis with recombinant tissue plasminogen activator is the standard of care in acute ischaemic stroke. Recanalization rates range from 6% to 57% [1], depending on location, thrombus length and assessment of recanalization [2]. Stent-retrievers have been reported to achieve recanalization rates between 60% and 90% [3]. Although recanalization has a strong relationship with outcome [4] the benefit of endovascular therapy is currently controversial [5].

The bridging concept of dose-adapted intravenous thrombolysis and endovascular recanalization com-

after standard intravenous thrombolysis. However, its effect after bridging thrombolysis remains unknown.

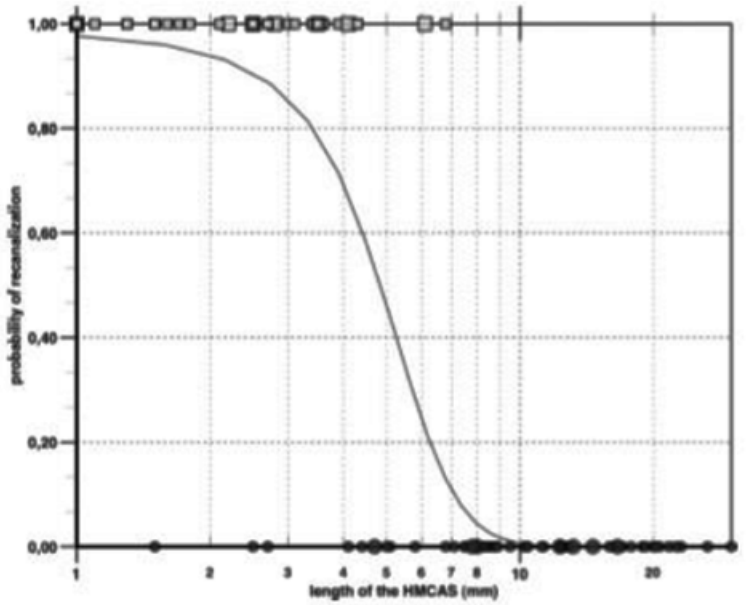
Initial computed tomography angiography (CTA) or magnetic resonance angiography (MRA) was compared with the initial angiography series to identify early recanalization rates after bridging thrombolysis. Thrombus lengths were measured in these patients since it has been proposed that shorter thrombus length is highly associated with successful recanalization after intravenous thrombolysis [2].

Patients with acute intracranial vessel occlusion confirmed by CTA or MRA were analyzed. All patients received intravenous thrombolytic therapy

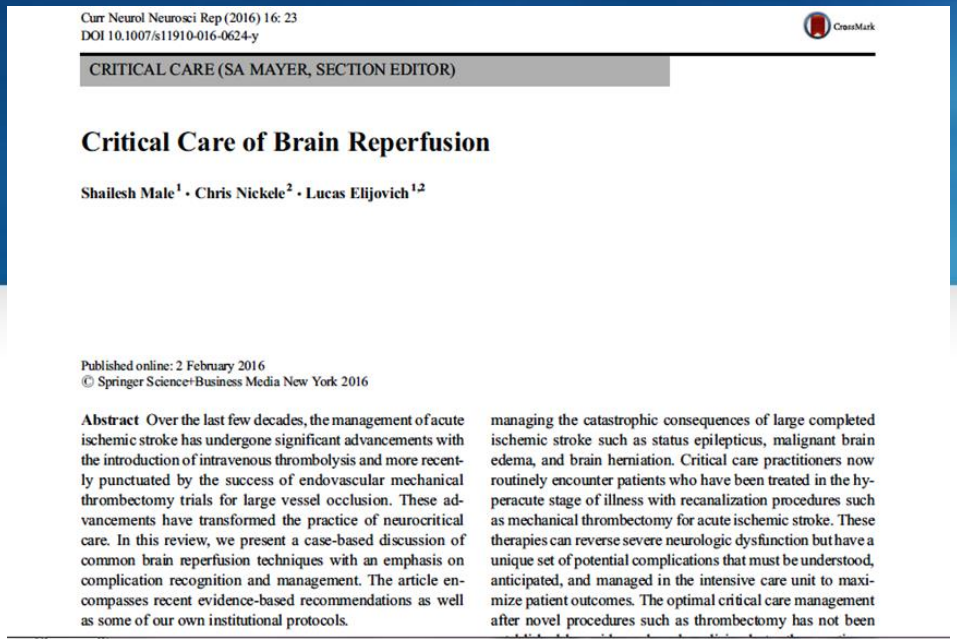
- European Journal of Neurology 2014, 21: 1406–1410
- Herbir milimetre rekanalizasyon şansını düşürmektedir.
- (başarılı rekanalizasyon 10,8 mm)
- >16 mm başarılamamış

Stroke. 2011;42:1775-1777.

- 2.5 mm kesitli BT
- Trombüs uzunluğu >8 mm olan hastalarda TCD'de rekanalizasyon gözlenmemiştir.
- 5 mm< trombüsler daha kolay dağılırlar.



Trombüs uzunluğu-rekanalizasyon oranı-logistik regresyon curve



Curr Neurol Neurosci Rep (2016) 16: 23
DOI 10.1007/s11910-016-0624-y

CRITICAL CARE (SA MAYER, SECTION EDITOR)

Critical Care of Brain Reperfusion

Shailesh Male[1] · Chris Nickele[2] · Lucas Elijovich[1,2]

Published online: 2 February 2016

Abstract Over the last few decades, the management of acute ischemic stroke has undergone significant advancements with the introduction of intravenous thrombolysis and more recently punctuated by the success of endovascular mechanical thrombectomy trials for large vessel occlusion. These advancements have transformed the practice of neurocritical care. In this review, we present a case-based discussion of common brain reperfusion techniques with an emphasis on complication recognition and management. The article encompasses recent evidence-based recommendations as well as some of our own institutional protocols.

managing the catastrophic consequences of large completed ischemic stroke such as status epilepticus, malignant brain edema, and brain herniation. Critical care practitioners now routinely encounter patients who have been treated in the hyperacute stage of illness with recanalization procedures such as mechanical thrombectomy for acute ischemic stroke. These therapies can reverse severe neurologic dysfunction but have a unique set of potential complications that must be understood, anticipated, and managed in the intensive care unit to maximize patient outcomes. The optimal critical care management after novel procedures such as thrombectomy has not been

- Curr Neurol Neurosci Rep (2016) 16: 23
- Hastaların reperfüzyon stratejilerinden fayda gördüğüne dair kanıt vardır
- Bu girişimlerden sonraki bakımın çok önemli olduğunu fakat yüksek kanıt düzeyi oluşturacak çalışmaların bu alanda yapılmadığını ifade etmektedir.

Pattern of Response of National Institutes of Health Stroke Scale Components to Early Recanalization in the CLOTBUST Trial

Robert Mikulik, MD, PhD; Ladislav Dusek, PhD; Michael D. Hill, MD; Eva Fulep, MD; James C. Grotta, MD; Marc Ribo, PhD; Carlos Molina, PhD; Andrei V. Alexandrov, MD; for the CLOTBUST Investigators

Background and Purpose—Early recanalization is the likely mechanism by which intravenous thrombolysis improves stroke outcomes. Limited data exist on the patterns of early recovery of various brain functions.

Methods—Data from the Combined Lysis of Thrombus in Brain Ischemia Using Transcranial Ultrasound and Systemic t-PA (CLOTBUST) trial was used to determine time-related trends in neurological function recovery, as measured by National Institutes of Health Stroke Scale (NIHSS) components at baseline, 30, 60, 90, 120 minutes, and 24 hours. Repeated-measures ANOVA was used to compare patients with complete recanalization versus no or partial recanalization of the middle cerebral artery (MCA) at 120 minutes from tissue plasminogen activator bolus. The correlation structure of the NIHSS was analyzed with multivariable factor analysis. The ability of individual components to diagnose recanalization was assessed with area under the receiver operating characteristic curves.

Results—Altogether, 113 patients from the CLOTBUST trial had complete follow-up NIHSS scores available. All received 0.9 mg/kg IV tissue plasminogen activator within 3 hours of symptom onset (mean age 69±12 years; 58% men; median NIHSS 16; complete MCA recanalization 27%). All NIHSS components attributable to MCA occlusion contributed with varying degrees to the decrease of the total NIHSS score after MCA recanalization. NIHSS components responded in 2 major and mutually independent clusters representing left and right brain functions. The best performing component in diagnosing recanalization was gaze deviation (area under the receiver operating characteristic curve=0.80), but its results were similar to the total NIHSS score (area under the receiver operating characteristic curve=0.75).

Conclusions—All neurological functions, impaired because of MCA occlusion, recovered after recanalization, although not to the same extent. The total NIHSS score is more useful than the individual components in detecting MCA recanalization. (***Stroke*. 2010;41:466-470.**)

- Stroke. 2010 Mar;41(3):466-70.
- 113 hasta klavuzlara uygun rt-PA almış
- 0,30,60,90,120 dk da 24 s de NIHSS bakmışlar
- NIHSS skorları rekanalizasyonu incelemek için kullanılabilir

Where Does the Time Go? The Effect of Protocols for Stroke Last Known Well Documentation on Intravenous Recombinant Tissue Plasminogen Activator Delivery in the Northeast

Rita Zanichkowsky, Jennifer A. Nascimento, Marie McCune, Cynthia Spencer, Florence Chukwuneke, Tiana Wyrick, Louise McCullough

ABSTRACT

Background: Despite significant efforts to improve thrombolytic use in the United States, only a small number of patients with ischemic stroke are currently treated. Although there are a number of contraindications to tissue plasminogen activator use, many patients are excluded because of the narrow therapeutic time window, which is determined by the "last known well" (LKW) time. However, it is unclear how the LKW is obtained and documented in the acute hospital setting. **Methods:** We surveyed hospitals throughout the Northeast region to determine if they had established protocols for documenting LKW times. Treatment rates as reported to Get with The Guidelines Stroke were then compared in hospitals with and without established protocols for documenting LKW times. **Results:** The majority of hospitals (73%) lacked established protocols for LKW documentation. Those without established protocols more often missed this variable when reporting to Get With The Guidelines-Stroke. Treatment rates were low overall (7%), although rates in patients who presented within 2 hours of symptom onset were high in hospitals whether they had an established protocol (86%) or not (87%). However, the lack of documentation of LKW is common and could influence the treatment rates if patients are erroneously excluded from treatment. **Conclusions:** Improved documentation of LKW times should be attempted. The addition of this variable to existing protocols could more accurately track the number of patients ineligible for treatment based on delayed presentation.

Keywords: ER protocols, ischemic stroke, thrombolytic use, treatment delay

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ABSTRACT

Background: Despite significant efforts to improve thrombolytic use in the United States, only a small number of patients with ischemic stroke are currently treated. Although there are a number of contraindications to tissue plasminogen activator use, many patients are excluded because of the narrow therapeutic time window, which is determined by the "last known well" (LKW) time. However, it is unclear how the LKW is obtained and documented in the acute hospital setting. **Methods:** We surveyed hospitals throughout the Northeast region to determine if they had established protocols for documenting LKW times. Treatment rates as reported to Get with The Guidelines Stroke were then compared in hospitals with and without established protocols for documenting LKW times. **Results:** The majority of hospitals (73%) lacked established protocols for LKW documentation. Those without established protocols more often missed this variable when reporting to Get With The Guidelines-Stroke. Treatment rates were low overall (7%), although rates in patients who presented within 2 hours of symptom onset were high in hospitals whether they had an established protocol (86%) or not (87%). However, the lack of documentation of LKW is common and could influence the treatment rates if patients are erroneously excluded from treatment. **Conclusions:** Improved documentation of LKW times should be attempted. The addition of this variable to existing protocols could more accurately track the number of patients ineligible for treatment based on delayed presentation.

Keywords: ER protocols, ischemic stroke, thrombolytic use, treatment delay

"Last known well"

Hastanelerin %73 ü bu konuda bir protokolü yok

- Tedavi oranı %7 idi
- Protk. ve dök. Olan hastalarda %86 idi..

Neuroprotective effects of salidroside on focal cerebral ischemia/reperfusion injury involve the nuclear erythroid 2-related factor 2 pathway

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Abstract

Salidroside, the main active ingredient extracted from Rhodiola crenulata, has been shown to be neuroprotective in ischemic cerebral injury, but the underlying mechanism for this neuroprotection is poorly understood. In the current study, the neuroprotective effect of salidroside on cerebral ischemia-induced oxidative stress and the role of the nuclear factor erythroid 2-related factor 2 (Nrf2) pathway was investigated in a rat model of middle cerebral artery occlusion. Salidroside (30 mg/kg) reduced infarct size, improved neurological function and histological changes, increased activity of superoxide dismutase and glutathione-S-transferase, and reduced malon-dialdehyde levels after cerebral ischemia and reperfusion. Furthermore, salidroside apparently increased Nrf2 and heme oxygenase-1 expression. These results suggest that salidroside exerts its neuroprotective effect against cerebral ischemia through anti-oxidant mechanisms and that activation of the Nrf2 pathway is involved. The Nrf2/antioxidant response element pathway may become a new therapeutic target for the treatment of ischemic stroke.

Cochrane Library

Cochrane Database of Systematic Reviews

Puerarin for ischaemic stroke (Review)

Liu B, Tan Y, Wang D, Liu M

ACİL TIP DERGİLERİNDE YAYINLANAN STROK MAKALELERİ

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Does Clopidogrel Plus Aspirin Dual Therapy Reduce Risk of Stroke in Patients at High Risk for Stroke?

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Stroke Prophylaxis in Atrial Fibrillation: Searching for Management Improvement Opportunities in the Emergency Department: The HERMES-AF Study

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† The participating investigators are listed in the Appendix .

Annals of Emergency Medicine

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Neurology/original research

Implementation of Computerized Physician Order Entry Is Associated With Increased Thrombolytic Administration for Emergency Department Patients With Acute Ischemic Stroke

Presented as an abstract at the Society for Academic Emergency Medicine annual meeting, May 2014, Dallas, TX.

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Emerg Med J 2015;**32**:100-104 doi:10.1136/emermed-2013-202993

Original article

Reducing delay to stroke thrombolysis—lessons learnt from the Stroke 90 Project

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Received 1 July 2013
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Abstract

Background The Stroke 90 Project was implemented to reduce delays to stroke thrombolysis and involved 7 hospitals and 2 ambulance services in the Avon, Gloucester, Wiltshire and Somerset regional network. Interventions included a direct to CT (DtoCT) protocol for paramedics to transport patients directly to the CT scanner. Coincidentally, there were severe winter pressures on all participating emergency departments during this period.

Methods Comparison of data from 2 groups across all 7 hospitals: preintervention (n=136) and postintervention patients (n=215) thrombolysed from August 2012 to January 2013. The χ^2 test, t tests, multiple and linear regression were used for analysis.

Results Ambulance transport times were 56.8 min for preintervention versus 57.5 min for

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Original article

The association between prehospital care and in-hospital treatment decisions in acute stroke: a cohort study

OPEN ACCESS

James P Sheppard[1,2], **Ruth M Mellor**[1], **Sheila Greenfield**[1], **Jonathan Mant**[3], **Tom Quinn**[4], **David Sandler**[5], **Don Sims**[6], **Satinder Singh**[1], **Matthew Ward**[7], **Richard J McManus**[2] on behalf of the CLAHRC BBC investigators

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Abstract

Background Hospital prealerting in acute stroke improves the timeliness of subsequent treatment, but little is known about the impact of prehospital assessments on in-hospital care.

Objective Examine the association between prehospital assessments and notification by emergency medical service staff on the subsequent acute stroke care pathway

Stroke'un geleceği

- ***İV + İA farmakolojik + mekanik yöntemlerin çeşitli kombinasyonlarından ile tedaviler daha geniş zaman penceresi ve daha yüksek oranda rekanalizasyon yüzdeleri vermeye aday gözükmektedir.***
  - Büyük damar tıkanıklıklarında mekanik, diğerlerinde trombolitik tedaviye geçeceğiz

- Anjiografi ünitesi olan strok merkezlerinin önemi artacak

- Trombolitik verilmesini kısıtlayan kriterler (zaman ve dışlama kriterleri) esnetilecek

- Görüntülüme yöntemlerinin yardımı ile (onset time yanında) penumbra nın teşhisi tedaviye yön verecek unsurlardan olacaktır.

ADÜ STROK ANJİO ÜNİTESİ