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O001 / #1312

## ENDOVASCULAR THROMBECTOMY WITH OR WITHOUT ALTEPLASE FOR LARGE VESSEL OCCLUSION IN ACUTE ISCHEMIC STROKE PATIENTS: A COST-EFFECTIVENESS EVALUATION BASED ON META-ANALYSES

### FREE COMMUNICATIONS 01: ENDOVASCULAR THERAPY FOR ACUTE STROKE, ANEURYSMAL

C. Nguyen<sup>1,2,3</sup>, M. Lahr<sup>2</sup>, D.-J. Van Der Zee<sup>1,2</sup>, L. Rinkel<sup>4</sup>, H. Van Voorst<sup>5,6</sup>, F. Pinckaers<sup>7,8</sup>, N. Lecouffe<sup>4</sup>, M. Kappelhof<sup>5</sup>, K. Treurniet<sup>5</sup>, J. Coutinho<sup>4</sup>, C. Majoie<sup>5</sup>, B.W.E.M. Roos<sup>4</sup>, E. Buskens<sup>1,2</sup>, M. Uyttenboogaart<sup>9,10</sup>

<sup>1</sup>University of Groningen, Operations Department, Groningen, Netherlands, <sup>2</sup>University Medical Center Groningen, Epidemiology Department, Groningen, Netherlands, <sup>3</sup>Hanoi University of Pharmacy, Pharmaceutical Administration And Economics, Hanoi, Viet Nam, <sup>4</sup>Amsterdam University Medical Center, location University of Amsterdam, Neurology Department, Amsterdam, Netherlands, <sup>5</sup>Amsterdam University Medical Center, location University of Amsterdam, Radiology And Nuclear Medicine Department, Amsterdam, Netherlands, <sup>6</sup>Amsterdam University Medical Center, location University of Amsterdam, Biomedical Engineering And Physics Department, Amsterdam, Netherlands, <sup>7</sup>Maastricht University Medical Centre+, Radiology And Nuclear Medicine Department, Maastricht, Netherlands, <sup>8</sup>Maastricht University, School For Cardiovascular Diseases, Maastricht, Netherlands, <sup>9</sup>University Medical Center Groningen, Neurology Department, Groningen, Netherlands, <sup>10</sup>University Medical Center Groningen, Radiology, Medical Imaging Center, Groningen, Netherlands

**Background and Aims:** The benefit of intravenous thrombolysis with alteplase before endovascular thrombectomy (EVT) for acute ischemic stroke patients due to large vessel occlusion (LVO) remains debated. Several randomized controlled trials (RCTs) failed to demonstrate non-inferiority of EVT alone. In this study, we analyzed the cost-effectiveness of alteplase before EVT versus EVT alone from the Dutch healthcare payer perspective.

**Methods:** A 10-year Monte Carlo simulation using a decision tree and Markov model was conducted to estimate the total costs, total quality-adjusted life years (QALYs), and incremental net monetary benefit (INMB) of alteplase before EVT compared to EVT alone. Functional outcome of each treatment was derived from pooled results of RCTs. Alteplase followed by EVT was considered cost-effective in case of a positive INMB at a threshold of \$84,000 per QALY gained.

**Results:** Applying weighted averages of functional outcomes collected from six RCTs, alteplase before EVT implied a 0.02 QALYs loss, while increasing costs by \$236, compared to EVT alone. Restricting the analyses to Western or Dutch patients only, alteplase before EVT yielded a 0.22 QALYs gain also at higher costs (\$5,387 and \$11,572), leading to a positive INMB (\$12,937 and \$6,544), respectively. At a threshold of \$84,000, alteplase before EVT appeared cost-effective in only 2.4% of the simulations for Western and Asian patients together, 98.4% for Western patients, and 64.8% for Dutch patients.

**Conclusions:** Alteplase before EVT was likely cost-effective in LVO patients in the Netherlands and should remain as the standard treatment strategy.

O002 / #1684

## MECHANICAL THROMBECTOMY IN ISCHEMIC STROKE PATIENTS WITHOUT SALVAGEABLE BRAIN TISSUE ON COMPUTED TOMOGRAPHY PERFUSION IMAGING

### FREE COMMUNICATIONS 01: ENDOVASCULAR THERAPY FOR ACUTE STROKE, ANEURYSMAL

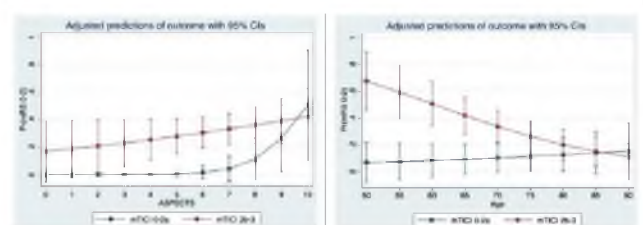
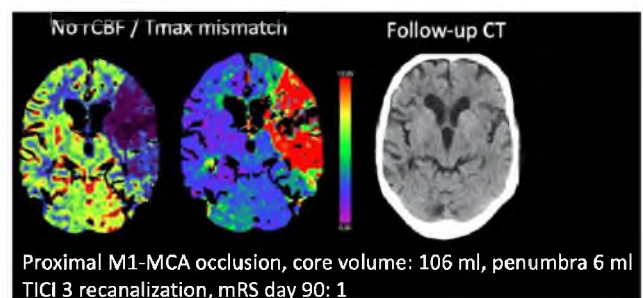
G. Broocks<sup>1</sup>, R. McDonough<sup>2</sup>, S. Klapproth<sup>1</sup>, G. Schön<sup>3</sup>, M. Bechstein<sup>1</sup>, A. Kemmling<sup>4</sup>, U. Hanning<sup>1</sup>, T. Faizy<sup>1</sup>, M. Bester<sup>1</sup>, J. Fiehler<sup>1</sup>, L. Meyer<sup>1</sup>

<sup>1</sup>University Medical Center Hamburg-Eppendorf, Neuroradiology, Hamburg, Germany, <sup>2</sup>University of Calgary, Radiology, Calgary, Canada, <sup>3</sup>University Hamburg, Epidemiology, Hamburg, Germany, <sup>4</sup>University Marburg, Neuroradiology, Marburg, Germany

**Background and Aims:** Computed tomography perfusion (CTP) is regularly used to guide patient selection for mechanical thrombectomy (MT). However, the effect of MT in patients without salvageable tissue on CTP has not been investigated.

**Methods:** Observational study analyzing ischemic stroke patients triaged by multimodal-CT undergoing MT. CTP lesion-core mismatch profiles were defined according to the EXTEND criteria. Primary endpoint was the rate of functional independence at 90-days, defined as modified Rankin Scale (mRS) score of 0-2. Recanalization was evaluated with the mTICI scale. The effect of baseline variables on functional outcome was assessed using multivariable logistic regression analysis. Outcomes of patients with and without CTP-mismatch profiles were compared using 1:1 propensity score matching (PSM).

**Results:** Of 724 patients who met the inclusion criteria, 110 patients (15%) had no CTP-mismatch and were analyzed. Successful recanalization was achieved in 66% (73) and associated with functional independence at 90-days (aOR: 5.92, 95%CI: 1.10-31.79, p=0.04). A significant interaction was observed between recanalization and age as well as the extent of



## EPI 143 / #1728

## EPIDEMIOLOGY OF CEREBROVASCULAR DISEASES IN THE REGION NEAR THE ARAL SEA

## E-POSTER VIEWING: AS03STROKE ETIOLOGY AND CLINICAL ASPECTS INCL. UNCOMMON STROKE DISORDERS AND CHALLENGING CASES

R. Matmurodov<sup>1</sup>, A. Tleubergenova<sup>2</sup><sup>1</sup>Tashkent medical academy, Neurology, Tashkent, Uzbekistan, <sup>2</sup>Tashkent medical academy, Neurology, Tashkent, Uzbekistan

**Background and Aims:** The epidemiology of cerebrovascular diseases in the region near the Aral Sea has a specific characteristic. It depends on many factors, including environmental adverse factors. Aim. To study the epidemiology of cerebrovascular diseases in the region near the Aral, Republic of Karakalpakstan.

**Methods:** In 2022 years, 1246 patients with stroke and 16122 Chronic cerebral ischemia in the Republic of Karakalpakstan were analyzed. Age and gender of all patients were analyzed. A comparative analysis was carried out according to the types of stroke. The prevalence of all diseases was studied per 10,000 population.

**Results:** All strokes were 1246 people, of which ischemic stroke was 820 patients (65.8%) and hemorrhagic stroke was 426 patients (34.2%). The prevalence of cerebral stroke was 12.4 per 10,000 population, while ischemic stroke was 8.4 and hemorrhagic stroke was 0.9. Subarachnoid hemorrhage also had a rate of 0.9. 166.9 cases of patients suffering from chronic circulatory disorders in the brain. Among the population close to the Aral Sea, acute strokes were more common, mainly manifested by the predominance of ischemic stroke. It should be emphasized that the highest incidence of diseases depends on the seasons, and it has a high rate mainly in spring and summer months.

**Conclusions:** The epidemiology of cerebrovascular diseases among the population near the Aral Sea has a specific character. The main reason for the spread of diseases is unfavorable environmental conditions. A large number of etiological diseases leading to stroke and a severe clinical course of the disease are the main reasons.

## EPI 144 / #2369

## TRANSIENT GLOBAL AMNESIA: CLINICAL AND IMAGING FEATURES

## E-POSTER VIEWING: AS03STROKE ETIOLOGY AND CLINICAL ASPECTS INCL. UNCOMMON STROKE DISORDERS AND CHALLENGING CASES

M. Mednini, M. Messelmani, S. Ben Mamou, H. Derbali, J. Zaouali, R. Mrissa

Military Hospital of instruction of Tunis, Neurology, Tunis, Tunisia

**Background and Aims:** Background and aims :Transient global amnesia (TGA) remains one of clinical neurology's most bewildering syndromes. TGA is defined by sudden temporary anterograde amnesia that is accompanied by continuous questioning. TGA's suggested mechanisms, clinical, and radiological aspects were discussed in this study.

**Methods:** Herein, we report the case of four patients who have been diagnosed with a TGA.

**Results:** The four patients were aged 64 years (case 1), 59 years (case 2) and 54 years (case 3) and 74 years (case 4). Two of them were males. Their medical history includes depression (case 1 and 2), arterial hypertension (case 2 and 4), type-2 diabetes mellitus (case 3 and 4).

Patients developed sudden onset of anterograde memory impairment with no additional neurologic symptoms. In two cases, emotional trauma preceded the incident, and the 4th case occurred in post surgery. Symptoms faded gradually and spontaneously over 14 hours (case 1), 6 hours

(cases 2 and 3), and 24 hours (case 4). Except for lacunar amnesia, no localized abnormalities were noted during the neurological evaluation. A brain MRI was performed on three patients, two had normal brain MRIs, whereas one had hippocampus DWI (diffusion-weighted imaging) lesions. **Conclusions:** Patients between the ages of 50 and 70 are more likely to experience transient global amnesia. The inability to acquire new memories while maintaining other neurological non-cognitive functions is the semiological hallmark of the diagnosis. The factors triggering this condition are still ambiguous, future research should focus on elucidating its pathophysiological mechanisms.

## EPI 145 / #2374

## MOYA MOYA: A RARE ETIOLOGY OF ISCHEMIC STROKE IN YOUNG ADULTS

## E-POSTER VIEWING: AS03STROKE ETIOLOGY AND CLINICAL ASPECTS INCL. UNCOMMON STROKE DISORDERS AND CHALLENGING CASES

M. Mednini, M. Messelmani, S. Ben Mamou, H. Derbali, J. Zaouali, R. Mrissa

Military hospital of tunis, Neurology, Tunis, Tunisia

**Background and Aims:** Moya Moya disease (MMD) is a chronic cerebrovascular disease affecting the termination of the intracranial internal carotid arteries and the proximal part of the Willis polygon. Our aim is to describe the clinical and radiologic features of two ischemic stroke patients diagnosed with moya moya disease.

**Methods:** We report the case of ischemic stroke in two young adults diagnosed with moya moya disease.

**Results:** A 40-year-old woman with a history of type 2 diabetes and a 24-year-old man with no notable pathological history were admitted to our department to for sudden onset neurological deficit. The neurological exam revealed a cognitive decline in the first patient with a right hemiparesis and a right lateral homonymous hemianopia. A left hemiparesis was found in the second patient. The brain MRI of the first patient showed multiple ischemic lesions in the superficial MCA territories, bilaterally more extensive on the left, with angiographic occlusion of the internal carotid arteries bilaterally in the post-bulbar region and a large bilateral leptomeninges arterial supply network. In the second patient, the MRI showed radiological features of Moya Moya disease, more marked on the left side, with junctional right ischemic stroke.

**Conclusions:** Although Moya disease is rare, it should be considered a possible etiology of stroke, particularly in children and young adults. Early diagnosis and appropriate treatment can help manage the symptoms and reduce the risk of complications associated with this condition.

## EPI 146 / #2282

## CARDIOEMBOLIC ISCHEMIC STROKE FROM THE IGNACIO CHAVEZ STROKE DATA BANK IN MEXICO CITY

## E-POSTER VIEWING: AS03STROKE ETIOLOGY AND CLINICAL ASPECTS INCL. UNCOMMON STROKE DISORDERS AND CHALLENGING CASES

A. Méndez-Domínguez<sup>1</sup>, J.A. Arias-Vega<sup>1</sup>, J.O. Martínez-Reding<sup>2</sup>, L.A. Rodríguez-Flores<sup>2</sup><sup>1</sup>National Institute of Cardiology "Ignacio Chávez", Neurology, Mexico City, Mexico, <sup>2</sup>Instituto Nacional de Cardiología "Ignacio Chávez", Consulta Externa, CDMX, Mexico

**Background and Aims:** Stroke is recognized as one of the most important complications in patients with heart disease, this study is a follow-up report from the National Institute of Cardiology Ignacio Chávez Stroke Data Bank, previously presented at the 14<sup>th</sup> WSO Singapore 2022. Our