

MSC VIRTUAL E-ABSTRACT
(E-Poster Presentation-Clinical) 03
Malaysian Stroke Conference 2021

DOI: <https://doi.org/10.32896/cvns.v3n3.15-21>
Published: 30.09.2021

**CASE REPORT: DUAL ANTIPLATELET IN CAPSULAR
WARNING SYNDROME**

Azliza Ibrahim¹, Ahmad Firdaus¹, Alvin Oliver Payus², Abdul Hanif Khan³, Liyana Najwa³, Hamidon Basri³, Mohd Fandi⁴

¹Department of Neurology, Hospital Pengajar Universiti Putra Malaysia Kuala Lumpur, Malaysia.

²Department of Medicine Based, Malaysia Sabah University Faculty of Health Sciences, Sabah, Malaysia.

³Department of Neurology, Faculty of Medicine and Health Sciences, Universiti Putra Malaysia, Kuala Lumpur, Malaysia.

⁴Department of Radiology, Hospital Pengajar Universiti Putra Malaysia Kuala Lumpur, Malaysia

ABSTRACT

Introduction: Capsular warning syndrome (CWS) is defined as a recurrent stereotype transient lacunar syndrome. The mechanism and clinical management of CWS has not been extensively studied.

Case presentation: 56-year-old gentleman with hypertension, dyslipidaemia and diabetes mellitus had a sudden onset left-sided weakness associated with dysarthria. The Diffusion-weighted imaging (DWI)-Fluid Attenuation Inversion Recovery (FLAIR) Magnetic Resonance Imaging (MRI) of the brain revealed an area of restricted diffusion and match lesion in the right basal ganglia with normal magnetic resonance angiography (MRA). During the admission, he experienced fluctuating neurological episodes lasted up to four days before he developed permanent left limb weakness. Repeated MRI brain showed non-evolving basal ganglia infarct or new lesion. He received double antiplatelet (DAPT) – a combination of Aspirin and Clopidogrel for a duration of 4 weeks followed by single antiplatelet- Aspirin alone for lifelong. Upon discharge, his functional Modified Rankin Score (MRS) was four which improved to two at 90 days post stroke.

Discussion: The history and clinical findings of this case were classical of capsular warning syndrome (CWS). Common risk factors for CWS are hypertension, dyslipidaemia, diabetes, and smoking, which suggest that atherosclerosis may be associated with CWS pathogenesis. There were few case reports which highlighted the effectiveness of DAPT in the treatment of CWS. One case series reported that two CWS patients, had no symptoms progression following DAPT while another retrospective study found that DAPT was associated with improved functional outcomes and decreased clinical fluctuations. Moreover, Kawano et al. addressing the loading dose of clopidogrel combined with other antithrombotic therapy may be an effective treatment for CWS. In summary, we report a case of CWS with fluctuating neurological symptoms showing consistent and favourable outcomes at 90 days of treatment with DAPT. In the light of this single case report, we would suggest a randomized control study to clarify the role of DAPT as one of the important therapeutic options for CWS patients.

ANXIETY, DEPRESSION AND OCCUPATIONAL PARTICIPATION OF STROKE SURVIVORS

Rosalini Mohd Mustaffa¹, Musaropah Sapihis², Puvithan Shanmugum³, Suhana Mohd @ Ariff²

¹Occupational Therapy Department, Hospital Kuala Lumpur, Malaysia

²Occupational Therapy Program, Institut Latihan Kementerian Kesihatan Malaysia Sungai Buloh, Jalan Hospital, Selangor, Malaysia

³Occupational Therapy Unit, Hospital Slim River, Perak, Malaysia

ABSTRACT

Introduction: Anxiety and depression are common emotional consequence of stroke survivor, and it affects their ability to participate in everyday life activities. This study examines the level of anxiety and depression of stroke survivors and its relationship on occupational participation.

Methods: Upon ethical approval, a cross-sectional study was conducted on stroke survivors, recruited from Hospital Sungai Buloh, Malaysia. Data were collected from stroke survivors (n=68) using Hospital Anxiety and Depression Scale (HADS) and Occupational Participation Questionnaire (OPQ). The OPQ has four domains of perceived occupational participations activities which include Instrumental activity of daily living (IADL); social; leisure and work activities. Data were analysed using Pearson correlation test of Statistical Package for the Social Sciences (SPSS 22.0).

Results: Majority of stroke survivors shown mild level of anxiety (36.8%) and mild level of depression (22.1%). Both anxiety and depression have negative correlation with occupational participation [IADL ($\rho < 0.001$, $r = -0.59$); leisure ($\rho < 0.001$, $r = -0.38$); social ($\rho < 0.001$, $r = -0.53$) and work ($\rho < 0.001$, $r = -0.62$)]; [$\rho < 0.005$, $r = -0.50$; $\rho < 0.0053$ $r = -0.44$; $\rho < 0.001$, $r = -0.57$; $\rho < 0.001$, $r = -0.58$]. The findings suggest that higher level of anxiety and depression will reduce occupational participation activity in IADL, social, leisure and work.

Conclusion: Anxiety and depression have significant implication in reducing activities of stroke survivors in IADL, social, leisure and work. Thus, evidence to occupational therapists to assess and intervene psychological aspect of stroke survivors.

ATRIAL FIBRILLATION IN HYPERTENSIVE PATIENT WITH PRIOR STROKE- A CASE REPORT

Jian Sheng Hoo¹

¹Department of Rehabilitation Medicine, Serdang Hospital, Ministry of Health, Malaysia.

ABSTRACT

Introduction: Atrial fibrillation is prevalent in about 1% of the world population. It is associated with a significant increase in thromboembolic complications such as stroke which can significantly decline the quality of life, cognitive function and increase rates of mortality and morbidity. Hypertension is a major risk factor for atrial fibrillation, due to cardiovascular remodelling.

Case report: A 60 years old male who is a non-smoker with hypertension, presented with sudden onset left hemiparesis and facial nerve palsy. Serial ECGs showed intermittent atrial fibrillation. Non-contrasted Computed tomography (CT) brain showed right corona radiata infarction. ECHO showed LVEF 50%, mild dilated left atrium and no thrombus. Electrolytes and thyroid function tests were normal. He was then initiated on oral anticoagulant.

Discussion: Atrial fibrillation is a major risk factor for ischemic stroke. All patients with stroke require a 12-lead electrocardiogram. Documentation of atrial fibrillation is required to initiate anticoagulant therapy after ischemic stroke. However, atrial fibrillation detected after stroke was most often asymptomatic and paroxysmal. Atrial fibrillation detected after stroke is most frequent within the first day after stroke, usually short lasted and low burden atrial fibrillation. Therefore, prolonged monitor for example serial ECGs, Holter monitoring or loop recorder seems reasonable in all survivors of an ischemic stroke without an established diagnosis of atrial fibrillation.

Conclusion: Patient with paroxysmal atrial fibrillation in the presence of risk factors should be regarded as having a stroke risk similar to those with persistent or permanent atrial fibrillation. The search for atrial fibrillations should be intensified in patient with prior stroke as has therapeutic and preventive implications.

RADIOLOGY WORKFLOW EFFICIENCY IN MANAGING STROKE PATIENT DURING PANDEMIC COVID-19: EARLY EXPERIENCE IN A TEACHING HOSPITAL

Nazhirah Azmi¹, Mohd Fandi Al-Khafiz Kamis¹, Ahmad Sobri Muda¹

¹Radiology, University Putra Malaysia Teaching Hospital, Malaysia

ABSTRACT

Introduction: Our stroke services were started on April 2020 during early pandemic of Covid-19 and it has created a tremendous strain among us. With rising number of Covid-19 cases, the stroke service continued as usual. “Time is brain” concept remains. Delays in providing treatment should be minimized. Safety requirements for prevention of Covid-19 infection are mandatory to be followed by the team.

Methods/ Procedure Details: All stroke patients will be considered as “positive Covid-19”. Upon receiving patient for the imaging, the radiology personnel (doctors, radiographers, nurses, paramedics) were equipped with personal protective equipment (PPE). Minimum number of staff attending patient should be planned to minimize risk of infection. MRI was used as first line imaging tools to diagnosed acute ischemic stroke. IV thrombolysis will be given if indicated during MRI. When the decision for thrombectomy was made, other team members will start preparing the angiography room to avoid delays. Patient will be immediately pushed to angiography suite after MRI and receiving staff should be wearing full covered PPE. Patient will be placed in isolation room in intensive care unit post thrombectomy. All the facility used by patient must be disinfect immediately after done procedure.

Results: There were 25 thrombectomies evaluated. Fast preparation upon receiving patient with unknown status of Covid-19 and clear workflow among team members could improve decision to puncture time. The average door to puncture time however still poor as the delay mainly due to financial related disruption and not due to preparation of the protective equipment.

Conclusion: Even pandemic covid-19 has given us greater challenge, time of patient receiving treatment for thrombolysis and/or thrombectomy should not be delayed. Clear workflow and fast preparation should be emphasized as it helps in reducing time resulting effective treatment plan for acute ischemic stroke patient with safety precautions.

ARE THERE MISSED OPPORTUNITIES IN REDUCING RISK OF RECURRENT CARDIOVASCULAR EVENT AMONG STROKE SURVIVORS LIVING IN THE COMMUNITY?

Che Man Zuraidah^{1,2}, Ewald Ben¹, Abdul Aziz Aznida Firzah³, Ali Mohd Fairuz³, Nasir Nazrila Hairizan⁴, Hubbard Isobel¹

¹Centre for Clinical Epidemiology and Biostatistics, Hunter Medical Research Institute, The University of Newcastle, Australia.

²Department of Emergency Medicine, Hospital Canselor Tuanku Muhriz, Malaysia.

³Department of Family Medicine, Faculty of Medicine, National University of Malaysia (UKM), Malaysia.

⁴Family Health Development Divison, Ministry of Health Malaysia, Putrajaya, Malaysia.

ABSTRACT

Introduction: Stroke survivors are at the highest risk of stroke recurrence within 90 days post-discharge, but the risk remains high up to 10 years after the initial stroke event (Mohan 2011). This study aims to assess missed opportunities in the long-term risk reduction strategies among stroke survivors in the community.

Methods: This study was a part of a study that analysed quantitative data that was integrated with findings from each participant's semi-structured interview. Participants were stroke survivors admitted to an urban university-affiliated tertiary medical centre with the clinical diagnosis of acute stroke or transient ischaemic attack (TIA) in Jan 2016-Jan 2017. The enrolled participants were resident aged at least 18 years old and able to ambulate independently. Participants with stroke secondary from other medical comorbidities and cognitive impairment were excluded. Potential participants were screened from emergency department's attendees and followed up regardless of their follow up status or sites

Results: A total of 89 participants consented to participate in this study. The mean age was 64 years old (SD 11), ranging from 36 to 88 years old, with the mean duration from the index stroke event was 2.37 years (SD 0.27). At discharge, 90% of stroke survivors fulfil the diagnosis of hypertension, 49% of diabetes mellitus and 96% of dyslipidaemia. Ninety-three percent were prescribed antihypertensive, 93% of diabetics prescribed antidiabetic agents and 96% with statins. Adherence to antidiabetics was highest at 91%, followed by antihypertensive at 76% and statin at 72%. At the time of the interview, only 31% of the hypertensive participants (including diabetic) achieved blood pressure under control, 32% of diabetics had HbA1c \leq 6.5%, while 25% achieved the goal for LDL cholesterol level.

Conclusion: The risk factors were addressed adequately at discharge, but there are still missed opportunity in sustaining adherence to prescribed medication resulting in suboptimal long-term control of the risk factors.

EFFICIENCY OF HAND-ARM LANGUAGE THERAPY

Navilashini Rajasekar¹

¹BASLP (Speech-Language Therapist)

ABSTRACT

Introduction: Aphasia is one of the most prevalent and long-lasting stroke sequelae, generally accompanied by a constellation of language deficiencies that severely limit communication abilities and reduce functional independence. Despite the chronicity of aphasia, patients with targeted language treatment can continue to restore lost language abilities years after stroke onset. Identifying viable and effective strategies to mitigate the impacts of cognitive decline in older persons is a top goal for academics, clinicians at the current era. Evidence indicates that exercise and cognitive training improve cognitive health in older persons; however, the scientific community has yet to endorse a preferred methodology.

Objective: The present study aimed to investigate the efficacy of a multidisciplinary approach comprising 2 different methods: speech and language therapy using intensive naming therapy (INT) and involving movements during this naming therapy. It is suggested that there is a potential positive interaction between motor movements and aphasia recovery.

Methods: In a single case study involving a 75-year-old male with global aphasia following a left-hemispheric brain lesion were assigned to 2 group of treatments: (1) intensive naming therapy (INT), and (2) intensive naming therapy along with movements involving upper limbs. Patient were assigned to these 2 groups of treatment, in counterbalanced order for 1-2 hours daily over a period of 2 months. Patient was re-assessed using a clinical language test (MS APHASIA SCREENING TEST).

Results: Patient showed a significant decrease in word-retrieval difficulty and significant increase in verbal output (true and relevant words) after combination of INT+ movements involving upper limb compared to the treatment involving only INT.

Conclusions: In patients with chronic non-fluent aphasia, intensive training combining both approaches are critical for improving verbal communication and social interaction. A combinational hand-arm-language paradigm may be beneficial for aphasia recovery in stroke patients and require further study.

THE RASH THAT SOLVED THE DIAGNOSTIC DILEMMA: AN OVERLOOKED CAUSE OF ISCHEMIC STROKE

Nair Pravind¹, Tiew Eng Seng¹, Chua Tiing Tiing², Ooi Mong How³, Toh Teck Hock²

¹Medical Department, Sarikei Hospital, Sarawak

²Clinical Research Centre, Sibuh Hospital, Sarawak

³Paediatric Department, Sarawak General Hospital, Kuching, Sarawak

ABSTRACT

Introduction: Although elderly ischaemic stroke is commonly due to hypertension or thromboembolic event, varicella vasculopathy is under recognised yet treatable cause.

Case: A 70-year-old woman who has diabetes, hypertension and hyperlipidaemia presented with slurring of speech and right-sided body weakness, after two days altered consciousness and headache. She also had painful left lumbar skin lesions for one week which she sought treatment but did not resolve. Upon admission, she had a fever, reduced power on four limbs and positive Babinski sign. The vesicular lesions was over T10-T12 dermatome area. Her cranial nerve examination was intact, while the NIHSS Score was 5 points. A plain brain computerised tomography showed acute right internal capsule infarct. Cerebral spinal fluid (CSF) showed lymphocytosis and normal protein as well as glucose ratio. The Gram stain culture were both normal. The CSF's PCR was positive for VZV. She was given two weeks of intravenous acyclovir, and she recovered fully. A repeat lumbar puncture at two weeks showed clearance of VZV.

Discussion: We reported a varicella-related stroke, an unusual yet treatable cause of stroke in the elderly. VZV vasculopathy due to productive virus infection of cerebral arteries is a recognised entity, but general doctors may not be as familiar. The skin lesions in our patient provided a clue to this and availability of onsite PCR test has allowed early confirmation of diagnosis and appropriate treatment.

Conclusion: Early recognition and confirmation of varicella vasculopathy in an elderly presenting with stroke is lifesaving as well as preventing unnecessary treatment and complication.