ENDOVASCULAR INTERVENTION FOR ACUTE ISCHEMIC STROKE AT CAN THO UNIVERSITY OF MEDICINE AND PHARMACY HOSPITAL

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ABSTRACT

Introduction: Acute cerebral ischemic stroke is a life-threatening emergency with high incidence of mortality and morbidity. Endovascular revascularization has been increasingly used as one of the treatment options. In this article, we report our outcomes of endovascular intervention for the treatment of ischemic stroke and highlight some technical experiences. Materials and methods: A cross-sectional descriptive study was conducted on all cerebral ischemic stroke patients who came to Can Tho University of Medicine and Pharmacy Hospital within 8 hours from the first symptom would be included. National Institute of health stroke (NIHSS) scale was used for stroke grading which should be 10 or above. The vascularization procedure would be performed with the thrombus aspiration systems or stent retrievers with or without angioplasty and stenting. Postprocedure care would be conducted for at least 2 weeks before discharge. Results: A total of 53 patients were recruited from 1st of January 2018 to 30th December 2020 (24 months). Male to female ratio was 1.54:1. Ages ranged from 38 to 90 (mean 64). NIHSS scores ranged from 12-25. Approximately 98% of patients had comorbidities with hypertension, diabetes, atrial fibrillation, mitral valve stenosis and valvular insufficiency, A-V block. Totally there were 44 patients experiencing thrombectomy with catheter-based distal aspiration (35), stent retrievers (03), aspiration and stent retriever combination (06). The total technical success rates for all procedures were 47/53 (88.6%)). The total death rate was 15/53 (28.3%) due to combining comorbiditiese. There were 31/53 patients (58.4%) who had significant recovered in muscle movement, language and cognition after 2 weeks. Conclusion: Endovascular intervention is a one of the good options for the management of acute ischemic stroke, which has a high revascularization rate (88.6%) and can save up to 58.4% of patients out of disability. Successful revascularization is the crucial first step to salvage the patients and obtain a better prognosis.

Keywords: acute ischemic stroke, IV rTPA, intra-arterial thrombolysis, catheter-based thrombectomy, intra and extracranial angioplasty and stenting.