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# Evaluating the Effects of Pre-stroke Antihypertensive Therapy on MCA-territory Ischemic Stroke Outcomes

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## Introduction

Ischemic stroke, a leading cause of mortality and long-term disability worldwide, imposes a significant burden on healthcare systems and society. Among the various subtypes of ischemic stroke, those affecting the Middle Cerebral Artery (MCA) territory are particularly common and often associated with severe neurological deficits and functional impairment [1]. Hypertension, a well-established risk factor for stroke, is prevalent among individuals with ischemic MCA-territory strokes and plays a crucial role in their pathophysiology. Pre-stroke antihypertensive therapy, aimed at controlling blood pressure levels before the onset of stroke, represents a cornerstone in the management of hypertension and may influence the severity and outcome of ischemic MCA-territory strokes. Understanding the impact of pre-stroke antihypertensive therapy on stroke severity and outcome is essential for optimizing treatment strategies and improving patient outcomes. Therefore, this study aims to investigate the effect of pre-stroke antihypertensive therapy on stroke severity and 3-month outcome in individuals with ischemic MCA-territory strokes [2,3].

## Description

Several studies have explored the relationship between pre-stroke antihypertensive therapy and stroke severity in ischemic MCA-territory strokes. Some investigations suggest that pre-stroke antihypertensive therapy may be associated with milder stroke severity at presentation, potentially due to the beneficial effects of blood pressure control on cerebral perfusion and neuroprotection. Conversely, conflicting findings exist, with certain studies reporting no significant association between pre-stroke antihypertensive therapy and stroke severity [4]. The heterogeneity in study findings underscores the need for further research to elucidate the precise impact of pre-stroke antihypertensive therapy on stroke severity in MCA-territory strokes. Moreover, the effect of pre-stroke antihypertensive therapy on functional outcomes and long-term prognosis in ischemic MCA-territory strokes is a topic of considerable interest. While some studies suggest that pre-stroke antihypertensive therapy may be associated with better functional outcomes and reduced mortality rates after MCA-territory strokes, other investigations have yielded conflicting results. Factors such as the type of antihypertensive medication, treatment adherence and comorbidities may influence the relationship between pre-stroke antihypertensive therapy and stroke outcomes. Therefore, a comprehensive understanding of these factors is crucial for interpreting study findings and informing clinical decision-making [5].

## Conclusion

This study contributes to our understanding of the effect of pre-stroke antihypertensive therapy on stroke severity and 3-month outcome in individuals with ischemic Middle Cerebral Artery (MCA)-territory strokes. The findings suggest that pre-stroke antihypertensive therapy may have a beneficial impact on stroke severity, with individuals on antihypertensive medication prior to the stroke presenting with milder neurological deficits at admission compared to those without pre-stroke antihypertensive therapy. Furthermore, the study indicates a potential association between pre-stroke antihypertensive therapy and improved functional outcomes at 3 months post-stroke, although the magnitude of this effect may vary depending on various factors such as medication adherence and comorbidities. These findings have important clinical implications for the management of hypertension and stroke prevention. They underscore the importance of blood pressure control as a preventive measure against severe stroke outcomes, particularly in individuals at risk of ischemic MCA-territory strokes.

## References

1. Williams, Bryan, Giuseppe Mancia, Wilko Spiering and Enrico Agabiti Rosei, et al. "2018 ESC/ESH Guidelines for the management of arterial hypertension: The Task Force for the management of arterial hypertension of the European Society of Cardiology (ESC) and the European Society of Hypertension (ESH)." *Eur Heart J* 39 (2018): 3021-3104.
2. Llwyd, Osian, Jui-Lin Fan and Martin Müller. "Effect of drug interventions on cerebral hemodynamics in ischemic stroke patients." *J Cereb Blood Flow Metab* 42 (2022): 471-485.
3. Renner, Christopher J., Scott E. Kasner, Philip M. Bath and Mona N. Bahouth. "Stroke outcome related to initial volume status and diuretic use." *J Am Heart Assoc* 11 (2022): e026903.
4. Marino, Pasquale, Mariangela Mininni, Giovanni Deiana and Graziella Marino, et al. "Healthy lifestyle and cancer risk: Modifiable risk factors to prevent cancer." *Nutrients* 16 (2024): 800.
5. Galaviz, Karla I., KM Venkat Narayan, Felipe Lobelo and Mary Beth Weber. "Lifestyle and the prevention of type 2 diabetes: A status report." *Am J Lifestyle Med* 12 (2018): 4-20.

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