CVA in Patient with Systemic Sclerosis on Aspirin Therapy: A Case Report

Rahyan Mahmud  
*Rowan University*

Bianna Koutsenko  
*Rowan University*

Kenneth Goich  
*Rowan University*

Usaid Hasan  
*Tidal Health*

Follow this and additional works at: https://rdw.rowan.edu/stratford_research_day

Part of the Diagnosis Commons, Internal Medicine Commons, Nervous System Diseases Commons, Pathological Conditions, Signs and Symptoms Commons, Quality Improvement Commons, Rheumatology Commons, Skin and Connective Tissue Diseases Commons, and the Therapeutics Commons

Let us know how access to this document benefits you - share your thoughts on our feedback form.
CVA in Patient with Systemic Sclerosis on Aspirin Therapy: A Case Report
Rahyan Mahmud1, OMS III; Bianna Koutsenko1, OMS III; Kenneth Goich1, OMS III; Usaid Hasan2, MD. Chief of Medicine

1 Rowan-Virtua School of Osteopathic Medicine, Stratford, New Jersey; 2 Tidal Health, Salisbury, Maryland

Background
Systemic sclerosis is an autoimmune disease characterized by immune system dysfunction, vasculopathy and fibroblast dysfunction leading to excess collagen deposition in the skin and internal organs. Patients with this condition are at higher risk of acute cerebral vascular events, but it is difficult to develop strategies for prevention due to our limited understanding of the pathophysiology of disease.2

Case
A 76-year-old female with a history of systemic sclerosis presented to the emergency department with acute onset slurred speech, facial droop, and left arm pain with a National Institutes of Health (NIH) Stroke Scale of 1. She was outside the thrombolytic window. Other history includes hypertension and hyperlipidemia; both were well controlled. MRI confirmed right frontal lobe ischemic stroke with additional ischemic foci in the temporal and parietal lobes. CTA neck and echocardiogram were negative for emboli source, and LDL was within normal limits. She was started on dual antiplatelet therapy (DAPT). The patient’s condition improved and by day 2 the only residual symptom was facial droop. She was discharged on DAPT with plans to transition to PLAVIX monotherapy after 90 days.

Discussion
This case illustrates that the risk of cerebrovascular accident in a patient with a history of systemic sclerosis may be increased. Other contributing risk factors in this patient include a history of hypertension and hyperlipidemia. However, the patient was not on antihypertensives because blood pressure was controlled outpatient without them. Permissive hypertensive was allowed but no longer present following dual antiplatelet therapy (DAPT). Her hyperlipidemia was controlled with statins and the lipid panel provided the most benefit for the first 21 days of DAPT, followed by monotherapy.

Conclusion
Clinicians must be aware of the increased neurovascular burden associated with systemic sclerosis and recommendations should be made to help guide clinical decision making. Further research should be done regarding pathophysiology and prevention of CVA in patients with systemic sclerosis.

References

Acknowledgement
I would like to acknowledge Georgia Koutsoula PA-C for her help and guidance reading the MRI and management of the patient. I would also like to acknowledge Dr. Kunwal Nusrallah for her help editing.

Table 1. Guidelines that can be used to date and classify acute ischemic strokes.

Figure 1. T1 weighted MRI. Hypointense signals from right frontal lobe extending towards base of ganglia (A), with additional ischemic foci in the temporal (B) and parietal lobes (C).

Figure 2. Possible paucity of vessels with stenosis territories.

Figure 2. Possible paucity of vessels with stenosis and intracerebral atherosclerosis in the MCA territories.