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## Vascular complications in patients with systemic sclerosis (Scleroderma)

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Vascular disease is a common symptom in scleroderma patients, and it often leads to morbidity and mortality. Some patients develop severe and sometimes life-threatening vascular dysfunction. Vascular dysfunction represents a fundamental role in the pathogenesis of systemic sclerosis. Vascular abnormalities are characterized by injury to vascular wall and extensive damage of the microvessels. Though scleroderma pathogenesis is still unknown, there are suggestions that endothelial cell layer of the microvascular is activated/injured early in the disease process leading to endothelial dysfunction, over-expression of adhesion molecules, enhanced leukocytes, proliferation of pericytes, adhesion and activation of platelets and influx of a perivascular infiltrate. The possibility of identifying microvascular activities at the early stage will improve the treatment of vascular complications with time. There are also studies on pathophysiology of macrovascular dysfunction in patients with SSc, a presentation of both vascular involvements their processes will be highlighted. This paper will present review of potential biomarkers that serve as surrogates for the vascular disease process in patients with scleroderma, and also present biomarkers that could be used as a predictor of pulmonary hypertension. This presentation will provide key reviews of causes and clinical consequences of vascular disease in scleroderma.

## Biography

Julius Bankole is a health researcher with more than a decade experience within health and academic institutions. His career stint includes working for Northern Health for the implementation of new information systems called Cerner Millennium across all the clinics and hospitals in the northern regions. He also worked with BC Cancer Agency and currently pursuing his Ph.D. in Health Sciences at UNBC. His research interests are in clinical epidemiology and biostatistics. He is also interested in developing novel techniques for improving health through research involving patients. He focuses on vascular complications in patients with systemic sclerosis, microparticle concentrations, and circulating factors in systemic sclerosis (scleroderma) disease activity.

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