



### ENDOTHELIAL DYSFUNCTION IN SYSTEMIC LUPUS ERYTHEMATOSUS

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#### Introduction

The endothelium is a crucial regulator of vascular homeostasis; lupus-associated chronic systemic inflammation may compromise endothelial functioning, triggering a chain of events that, when combined with established CVD risk factors, leads to the formation and progression of atherosclerosis

#### Purpose

To assess how SLE affects the function of endothelium

#### Material and methods

We have performed a database search of all relevant literature published until June 2022. The search included English written articles. Electronic databases including PubMed, Oxford Academics, Google Scholar were searched using the following terms: “SLE+endothelium dysfunction

#### Results

The search yielded 17 articles, out of which 11 articles were considered relevant published from 2002 to 2022. Out of 11 articles 2 were literature reviews and 9 cross-sectional and case control studies including a total number of 439 SLE patients. To date, the vast majority of available data, albeit not all, indicates that endothelium-dependent FMD values are lower in SLE patients compared to healthy subjects. Notably, FMD variations can be used to assess certain therapy methods' capacity to improve endothelial function in SLE patients

#### Conclusions

Endothelial function appears to be affected by SLE, potentially contributing to the increased cardiovascular risk observed in SLE patients