



INTRODUCTION

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Hypertension is a very common public health problem. It is easily controllable, but often leads to lethal complications if left untreated.

The main cause for increased mortality and morbidity in patients with hypertension is cardiovascular disease. This is because hypertension is one of the major risk factors for atherosclerosis. (1)

The endothelium is a monolayer of cells that lines the internal surface of blood vessels. It is located between the vessel lumen and the vascular smooth muscle cells. The endothelium plays a major role in the control of vascular tone, growth, haemostatic and inflammation. (2)

Endothelial dysfunction occurs when the balance between vasodilator and vasoconstrictor mediators is altered.

Endothelial dysfunction is seen in a number of conditions such as hypertension, diabetes, hyperlipidemia, obesity, smoking, aging and hyperhomocysteinemia.

An impaired nitric oxide mediated vasodilatation has been shown to be a major contributor to this endothelial dysfunction. (3)

It is an early event in the development of atherosclerosis (4), and can be detected before other structural changes.

In this study, we aim to study endothelial function in patients with hypertension and also studies the relation of factors such as duration of disease, dyslipidemia, left ventricular hypertrophy and retinopathy with endothelial function