

Chapter 1

HYPERTENSION AND STRESS

Ceylan AYADA¹

INTRODUCTION

Hypertension (high blood pressure) is a systemic disease characterized by high arterial blood pressure continuity and is an important health problem due to serious complications and frequent occurrence in the society⁽¹⁾. During rest, diastolic artery pressure is considered to be 90 mmHg and systolic arterial pressure greater than 140 mmHg⁽²⁾.

Hypertension is a complex and multifactorial disease that can occur due to many genetic and environmental factors⁽³⁾. Today, hypertension has become an epidemic affecting all the geographical regions of the world and primarily concerned with the adult population. Epidemiologic data show that the prevalence of hypertension, which is 20-25% at 30 years of age, increased significantly with age and rose to 50% over 60 years of age⁽⁴⁾. Increased activity of sympathetic nervous system (SNS), excessive production of vasoconstrictors such as endothelin and thromboxane and sodium-scavenging hormones, inadequate potassium and calcium intake, increased and inappropriate renin secretion, deficiencies of vasodilators such as prostoglandins and nitric oxide, congenital anomalies, diabetes, insulin many pathophysiologic factors such as resistance, obesity, increased activity in vascular

¹ Associate Professor, İzmir Bakırçay University Medical Faculty Department of Physiology İzmir/TURKEY, ceylanayada@gmail.com

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