

A Challenge to Modern Medicine: Hypertension

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Editorial

Cardiovascular disease is one of the primary causes of death in adults, as well as a major cause of morbidity. Hypertension is one of the most important modifiable risk factors for cardiovascular disease, and it is the most common non-communicable disease in India, accounting for about 10% of all fatalities. Adult hypertension has increased considerably in prevalence over the last three decades, from 5% to 20-40% in urban regions and 12-17% in rural areas.

Primary (essential) hypertension and secondary hypertension are the two types of hypertension; roughly 90-95 percent of cases are classified as "primary hypertension," which is high blood pressure without a clear underlying medical cause. Primary hypertension, also known as essential hypertension, is a genetic condition with susceptibility growing as one's environment changes. Other disorders that affect the kidneys, arteries, heart, or endocrine system produce the remaining 5-10% of cases (secondary hypertension). Secondary hypertension, on the other hand, arises when a patient has no family history of hypertension and there are no evident causes for a diagnosis.

Benign high blood pressure is essential hypertension that has been present for a long time and is asymptomatic. This type of high blood pressure is distinguished by the phrase benign from the more aggressive and rapidly developing accelerated hypertension, also known as malignant hypertension. If left untreated, malignant high blood pressure becomes increasingly acute and severe, eventually leading to stroke, heart attack, or heart failure. Pathologists coined the term "malignant hypertension" to describe patients who had acute target organ injury with fibrinoid necrosis of the arterial wall.

In contrast to rapid hypertension, benign elevated blood pressure is slow moving and less harmful. It can lay latent in people who aren't aware of it for years. In many populations, it is actually more common than malignant hypertension. The HLs form describes a patient who has been diagnosed with primary hypertension, which was previously controlled for a period of time, but whose blood pressure has now risen despite no changes in medicine or lifestyle. The patient's blood pressure gradually rises, eventually reaching exceptionally high levels of 240 mmHg/120 mmHg in a short period of time.

Even a moderate increase in arterial blood pressure is linked to a shorter lifespan. Although dietary and lifestyle adjustments can improve blood pressure regulation and reduce the risk of associated health issues, medication treatment may be required in persons who find lifestyle changes ineffective.

In the pathophysiology of essential hypertension, there appears to be a strong familial and genetic tendency, as well as a variety of modifiable predisposing variables. In connection studies with hypertension, more than 50 genes have been studied, and the number is constantly expanding. The angiotensinogen (AGT) gene is one of these genes. It was discovered that raising the amount of AGT raises blood pressure, which could lead to hypertension. In the previously published Genome Wide Association Study, SNPs were enriched for variants linked with obesity, type 2 diabetes, coronary heart disease, and kidney function in single variant testing, indicating that genetic loci related to blood pressure contribute to cardiovascular outcomes [1-5].

Acknowledgement

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Conflict of Interest

None.

References

1. Luft, Friedrich C. "Twins in cardiovascular genetic research." *Hypertension* 37(2001): 350-356.
2. Fagard, Robert, Jana Brguljan, Jan Staessen and Lutgarde Thijs, et al. "Heritability of conventional and ambulatory blood pressures: A study in twins." *Hypertension* 26 (1995): 919-924.
3. Surendran, Praveen, Fotios Drenos, Robin Young and Helen Warren, et al. "Trans-ancestry meta-analyses identify rare and common variants associated with blood pressure and hypertension." *Nat Genet* 48 (2016): 1151-1161.
4. Ehret, Georg B., Teresa Ferreira, Daniel I. Chasman, Anne U. Jackson, et al. "The genetics of blood pressure regulation and its target organs from association studies in 342,415 individuals." *Nat Genet* 48 (2016): 1171-1184.
5. Liu, Chunyu, Aldi T. Kraja, Jennifer A. Smith and Jennifer A. Brody, et al. "Meta-analysis identifies common and rare variants influencing blood pressure and overlapping with metabolic trait loci." *Nat Genet* 48 (2016): 1162-1170.

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