



Probable Etiology of Hypertension According To the Iranian Traditional Medicine

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Dear Editor in Chief

Hypertension is one of the main causes of the global burden of diseases in the world. Despite the advances in modern medicine, the main causes of blood pressure increase are still unknown in 95% of cases. Environmental and genetic factors such as salt sensitivity are considered as the most important mechanisms in producing the common form of hypertension (Essential hypertension) (1). Historically, hypertension has not been considered as a disease in ancient Greek and Persian medical textbooks (2). It seems that over the centuries, due to the lack of proper tools to measure blood pressure, ancient physicians have diagnosed and treated hypertension according to observational signs and symptoms. In this article, a list of possible causes of hypertension based on the principles of Iranian Traditional Medicine (ITM) is reviewed. Based on teaching of ITM, any disease or injury can arise from a direct damage to an organ or can actually be a manifestation of damage originating in other organs which apparently do not seem to be sick. These organs in ancient medicine are called associated organs (3).

Regarding this, three major organs of heart, vessels, and intravascular fluid (blood) as main affected organs and brain, stomach, kidney, liver,

and lung as associated organs should be taken into account.

In dealing with hypertension pertinent to heart, hyperactivity of heart pump caused by hot dystemperament (*Sui' a Mizaj*) (change in whole body or an organ temperament) (4) and the one related to vessels, dry dystemperament caused by descending of abnormal black bile (abnormal *Sanda*) to vessel wall that seems to be equivalent with atherosclerosis (5, 6) can cause hypertension. In terms of intravascular fluid, qualitative or quantitative changes should be considered. Here, in the case of quantitative changes in blood, the increase in blood volume leads to vascular tension and in the case of qualitative changes, increased blood viscosity could lead to creation of blockage inside vessels and the rise in blood pressure (7).

In the case of associated organs, considering the role of psycho-neural disorders in all sorts of high blood pressure, psychic states should be considered (4, 8).

Given the role of gastrointestinal disorders, any disruption and in the first step of digestion (gastric digestion), which may lead to improper humors mixture (9) or failure to discharge waste products from the body (constipation), incidence of many

diseases including hypertension would be expected.

Liver is heart's servant because it prepares the food for heart to work (4, 10). Therefore, a defect in digestive power of liver leading to the production of inappropriate humors (4) decreases heart blood supply, so heart has to work harder than before to push enough blood to target organs. This increases the load on heart pump to maintain adequate blood supply to organs and may result in hypertension.

In the case of kidney disorders due to inadequate waste products excretion especially fluids from the body (1), blood pressure may increase as the result of intravenous fluids accumulation.

Contagion of hot dys temperament of lungs to heart due to their proximity (4) would increase blood pressure because of hot heart dys temperament.

So, it seems that different causes can lead to hypertension and hypertension according to the Iranian Traditional Medicine. Therefore, it is necessary to determine the main cause of blood pressure rise in every patient and then choose a proper treatment for each one based on his/her etiology since selecting an appropriate treatment will yield maximum efficiency. This is considered as a merit and advantage of Iranian Traditional Medicine as a holistic and ancient medical school in the world. Based on its principles, a physician must treat the patient rather than the disease.

In conclusion, the approach to hypertension from new perspectives and selection of appropriate strategies can help physicians to prevent or treat hypertension more effectively. Obviously, further investigation could open up new gates toward finding other reasons for hypertension in the future studies.

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References

1. Longo D, Fauci A, Kasper D, Hauser S, Jameson J, Loscalzo J (2012). *Harrison's principles of internal medicine*. ed. McGraw-Hill, U.S.
2. Ahmad S (2007). Clinical evaluation of khamceera sandal sada in the management of zaghtuddum qavi ibtidai. Rajiv Gandhi University of Health Sciences.
3. Aghili Khorasani MA (2006). *The summary of wisdom (kholasa al-bekma)*. 1st ed. Institute of Medical History, Complementary and Islamic Medicine, Tehran – Iran pp. 537 – 40, 246, 367, 86.
4. Avicenna (2003). *The canon of medicine*. Institute of Scientific Publication, Beirut – Lebanon.
5. Choopani R, Mosaddegh M, GooshahGir AA, Emtiazy M (2012). Avicenna (Ibn Sina) aspect of atherosclerosis. *Int J Cardiol*, 156:330.
6. Emtiazy M, Choopani R, Khodadoost M, Tansaz M, Nazem E (2013). Atheroprotector role of the spleen based on the teaching of avicenna (ibn sina). *Int J Cardiol*, 167:26-8.
7. Letcher RL, Chien S, Pickering TG, Sealey JE, Laragh JH (1981). Direct relationship between blood pressure and blood viscosity in normal and hypertensive subjects: Role of fibrinogen and concentration. *Am J Med*, 70:1195-202.
8. Mosaddegh M, Shariatpanahi N, Minaee MB, Ahmadian-Attari MM (2012). Avicenna's view on heart and emotions interaction. *Int J Cardiol*, 162:256-7.
9. Emtiazy M, Keshavarz M, Khodadoost M, kamalinejad M, GooshahGir AA, Shahradi Bajestani H, Dabbaghian FH, Alizad M (2012). Relation between body humors and hypercholesterolemia: An Iranian Traditional Medicine perspective based on the teaching of avicenna. *Iran Red Crescent Med J*, 14:133-8.
10. Arzani MA (2012). *Mofarreh al-gholob*. 1st ed. Al-maei Publication, Tehran – Iran.