Research Paper CHEMISTRY

Role of Ayurvedic Medicines in Controlling Hypertension

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ABSTRACT

HIGH blood pressure is disease which can damage the vital organs of the body.it may cause heart attack, stroke, renal failure and vision loss. To ensure the proper health the blood pressure should be regularly monitored and all care must be taken to tackle high level of blood pressure. There is availability of wide range of allopathic and ayurvedic drugs which can be beneficial. The allopathic drugs are having certain side effects, while it has been claimed in ayurvedic literature that most of the ayurvedic drugs are free from any side effects.

KEYWORDS | High Blood Pressure, Heart Attack, Stress, Ayurvedic Medicines, Allopathic Medicines

Quite a high percentage of population has high blood pressure,(hypertension). Stress, diet, and lack of exercise are the main factors which are responsible to raise the blood pressure. High blood pressure increases risk for several other health problems such as heart attack, stroke, heart failure, kidney disease, vision loss, and metabolic syndrome. To prevent the damage to these vital organs, blood pressure should be regularly monitored and all steps should be taken to control the elevated blood pressure. The blood pressure between 120/80 (systolic 120 and diastolic 80)is considered to be normal range of blood pressure, range between 120/80 - 140/90 is considered as Pre-hypertension and the pressure between 140/90 and higher is considered to be High blood pressure. The pressure up to 140/90 can be managed by change of life style, which includes change of food habits, consuming less salt, avoiding alcohol/smoking, increasing physical exercise, meditating and by relaxing (avoiding all factors which causes stress) (Sharma,2015).but if the blood pressure is more than 140/90 and change of life style does not help then one should opt for medication.

Wide ranges of Allopathic as well as Ayurvedic drugs are available in the market.

The allopathic drugs includes diuretics, calcium channel blockers, beta blockers, alpha blockers,ACE inhibitors. The allopathic drugs are quite effective but still they may have many side certain side effets,such as;

Diuretics(Thiazide) used in allopathy reduce blood pressure by removing extra fluids by frequent urination.Thsese diuretics have side effects like muscle cramps, dehydration, dizziness, extreme tiredness, skin rash, blurred vision, abnormal heart rate.

ACE inhibitors include cough, kidney failure, skin rash, vomiting, diarrhea, fever, sore throat as side effects.

Calcium channel blockers have fatigue, headache, skin rash, diarrhea, constipation, edema side effects

Alpha blockers may cause "first-dose effect." It develops pronounced low blood pressure and dizziness, which can make suddenly faint when paatient rise from a sitting or lying position. Other side effects include headache, pounding heartbeat, nausea, weakness, weight gain and small decreases in low-density lipoprotein (LDL) cholesterol (the "bad" cholesterol).

Centrally acting drugs for blood pressure may cause a number of side effects, including muscle weakness, fatigue, drowsiness, depression, dry mouth, and constipation.

Peripheral adrenergic antagonists have side effects which includes include dizziness, lightheadedness, diarrhea, heartburn and a stuffy nose.

Vasodilators; have certain side effects which include headache, nausea or vomiting, diarrhea and loss of apetite

Beta Blokers ;it include nausea,diarrhea,stomach cramps,-vomiting and in some patients it can cause reduced sexual urge.

In ayurvedic literature it has been claimed that ayurvedic medicines are free of side effects,and herbs (present in ayurvedic medicines) do not interfere with allopathic medicines including diuretics, blood thinners, β-blockers, calcium channel blockers and vasodilators etc.

Most commonly used Ayurvedic medicines for hypertension may contain -Brahmi, Sankha-pushpi, Ustukhudusa (Arabian or French Lavender), Arjuna, Puskara-mula, Jata-mamsi, Sarpagandha, Jyotishmati, Vaca, Ashvagandha and other cooling herbs like Moti Pishti (Mukta Pishti).

Brahmi; Brahmi is an annual creeping plant found throughout India including the North Eastern region. Two chemicals in Bhrami, bacosides A and B, improve the transmission of impulses between nerve cells in the brain. It (Bramhi) has ability to boost brain function and reduces anxiety, this herb also induces a sense of calm and peace in its users reduces the effects of stress and nervous anxiety thereby decreases blood pressure.

Ashwagandha - The root and berry are used to make medicine. The name Ashwagandha is from the Sanskrit language and is a combination of the word ashva, meaning horse, and gandha, meaning smell. The root has a strong aroma that is described as "horse-like.".it is a wonderful adaptogen, increasing the body's resistance and has anti-stress activity in rats(Archana & Namasivayam, 1999).Some workers(Shah, Gilani, Sharma and Vohora, 2005)have shown that Ayurvedic Swarna Bhasma and Unani Kushta Tila Kalan elevates the Serotonin level(relaxant) in rats,hence lowers the elevated blood pressure.

Shankhpushpi is an Ayurvedic drug which contains several types of alkaloids, flavanoids, and coumarins as active chemicals that bring about its biological effects(Sethiya,et al.,2009,2010). the relaxation of mind results in lowering of blood pressure.

Moti pisti(mukta pisti) Mukta Pishti ; is an Ayurvedic medicine, prepared from Pearl. It acts as cardiac tonic and anti hypertensive.This medicine should only be taken under strict medical supervision.Overdosage may cause over lowering of Blood pressure.

Arjuna(Terminalia Arjuna); Terminalia arjuna bark contains chemicals chemicals such as; triterpene glycosides, arjunetoside, together with oleanolic, arjunolic and arjunic acids, and a cardenolide.

Arjuna herb works as a heart tonic ,helps to maintain normal blood pressure, promotes proper blood flow and normal homocysteine levels..Arjuna supports the blood's absorption of lipids indicating it has cholesterol-regulating properties. Arjuna herb helps to reduce the effects of stress and nervousness on the heart.

CONCLUSION; undiagnosed and uncontrolled high blood pressure can have dangerous effects on the vital parts of body,it should be controlled by using allopathic or ayurvedic medicines. The allopathic preparations have few noticeable side effects, but there is no doubt in their efficacy. On other hand Ayurvedic medicines may show positive results to lower the high level of blood pressure, and moreover there are claims, that these medicines do not have side effects .However there is need for verification of working of these drugs(ayurvedic) using latest scientific techniques.

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