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### RESEARCH ARTICLE

#### NON-PHARMACOLOGICAL MANAGEMENT OF ZIGHTUDDAM QAWI (HYPERTENSION) IN UNANI SYSTEM OF MEDICINE

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#### Abstract

In Unani System of Medicine, the concept of Zightuddam Qawi (Hypertension) is described under the heading of Imtila (Congestion of fluid in the body) by many Unani physicians. Hypertension is basically a disease of blood vessels in which vessels have elevated pressure. The possible causes of this disease mentioned in Unani system of medicine are Sue Mizaj Damvi (abnormal sanguineous temperament), Sauda-e-Muhatriqa (burnt melanin) and Mizaj Haar Yabis (hot and dry temperament). In modern medicine, Hypertension is enlisted in the category of lifestyle disorders. The factors which predispose Hypertension include obesity, excessive salt intake, alcohol and smoking etc. In the view of Unani medicine, the non-pharmacological management of Hypertension can be achieved by Ilaj-bil-Ghiza (Dietotherapy) and Ilaj-bit-Tadbeer (Regimenal Therapy). The therapies which can be beneficial in the Hypertension are Fasd (Venesection), Hijamah (Cupping), Riyazat (Exercise), Dalak (Massage) and Hammam (Turkish bath/ Steam bath).

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#### Introduction:-

In Unani system of medicine, Zightuddam Qawi (Hypertension) is defined as a condition which persist with high arterial blood pressure while the term Imtila (Congestion) is defined as accumulation of body fluid specially blood in different parts of the body.<sup>[1]</sup> In ancient Unani literature, there is no proper description available for the disease termed as Zightuddam Qawi (Hypertension) though various Unani physicians have described Imtila (Congestion) as a pathological condition in which clinical features are almost same as the clinical features of Hypertension. So, Imtila and Zightuddam Qawi can be co-related with each other in the same context. Therefore, Unani concept of Zightuddam Qawi has been described by Unani physicians under the topic of Imtila and they have also stated that it mostly occurs due to Sue Mizaj Damvi (abnormal sanguineous temperament).<sup>[2]</sup> Elevated blood pressure or Hypertension is basically a disease of blood vessels in which vessels have raised blood pressure. When pressure is higher in blood vessels, the heart has to work harder as blood pressure is created due to pushing of blood against

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vessel wall by pumping of heart. Long standing untreated cases of Hypertension may lead to various cardiac disorders like cardiomegaly and cardiac failure. Along with this, Hypertension may also cause stroke, renal failure, aneurysms and blindness etc.<sup>[3]</sup> The data declared by World Health Organization (W.H.O) estimates that 1.13 billion people are suffering from Hypertension globally. Around two third patients of Hypertension are residing in low and middle income countries. In India, Hypertension has a prevalence rate around 29.9% while this disease is the most prominent cause of premature deaths worldwide.<sup>[3][4]</sup> The modern medical science has classified Hypertension into two major categories known as primary (essential) and secondary. 90-95% cases of Hypertension are primary while only 5-10% cases of Hypertension are secondary. Apart from genetic and other non-modifiable factors, the major predisposing or etiological factor for primary Hypertension is poor lifestyle which includes the most commonly associated modifiable factors such as obesity, physical inactivity or sedentary lifestyle, bad eating habits specially excessive salt intake, smoking and consumption of alcohol etc. The etiology of secondary Hypertension is based on it's association with other pathologies like chronic kidney disease and endocrine disorder etc.<sup>[5]</sup>

The possible pathology of Hypertension which is explained in Unani system of medicine is that there is an accumulation of morbid matter (mawad-e-fasida) in different parts of the body especially in blood vessels. This abnormal accumulation increases tension and pressure in the vessel wall. The possible causes for this accumulation of morbid matters are mentioned in Unani medicine as excessive intake of food, consumption of alcohol, physical inactivity and prolong Hammam (Steam bath / Turkish bath). In Unani system of medicine, as Zightuddam Qawi (Hypertension) and Imtila (Congestion) are considered as equivalent on the basis of clinical features therefore Zightuddam Qawi can be categorized into two types under the heading of Imtila. First one is 'imtila bi hasbil auiya', in which there is an increase in blood volume causing increase in blood pressure. The second one is 'imtila bi hasbil quwa', in which there is an excess of deranged humors in quantity as well as quality.<sup>[2][6][7]</sup> The clinical features and manifestations of Imtila described in Unani medicine are headache, congestion in the eyes, puffiness over face, lethargy, flushing of face, restlessness and epistaxis etc.<sup>[8][9]</sup> Severe Imtila may cause hemorrhage or apoplexy or even sudden death.<sup>[10]</sup>

### Discussion:-

The British Hypertension Society has classified Hypertension as mild, moderate and severe. When systolic blood pressure is between 140-159 mm of Hg and diastolic blood pressure is between 90-99 mm of Hg, it is termed as mild hypertension. The systolic blood pressure between 160-179 mm of Hg and diastolic blood pressure between 100-109 mm of Hg is known as moderate hypertension. If systolic blood pressure is 180 mm of hg or above while diastolic blood pressure is 110 mm of hg or above, it is categorized as severe hypertension.<sup>[11]</sup> In Unani system of medicine, pathophysiology of Imtila / Zightuddam Qawi mostly revolves around Sue Mizaj Damvi (abnormal sanguineous temperament). Apart from this sue mizaj damvi, weakness of arteries causing difficulty in contractions and relaxations of vessels is also a prominent cause of Hypertension explained in Unani as it leads to accumulation of abnormal humors in the vessels. Muhatriqa Sauda (burnt melanin) which has dryness (yaboosat) in it causes stiffness (salabat) in vessels which also leads to difficulty in contraction and relaxation. Hot and Dry Temperament (haar yabis mizaj) in anger, anxiety and tension etc may also cause same effects on blood vessels which can lead to Imtila or Zightuddam Qawi.<sup>[2][6][7][12][13]</sup>

### The Approach Towards Management Of Zightuddam Qawi (Hypertension):

There are basically four methods of treatment available to treat a disease in Unani system of medicine namely Ilaj-bil-Ghiza (Dietotherapy), Ilaj-bit-Tadbeer (Regimenal therapy), Ilaj-bil-Dawa (Pharmacotherapy) and Ilaj-bil-Yad (Surgery).<sup>[14][15][16]</sup> From these methods of treatment, Ilaj-bil-Ghiza and Ilaj-bit-Tadbeer are related to Asbab-e-Sitta Zarooriya (six essential causes). Any modulation or modification in these Asbab-e-Sitta Zarooriya which are done purposely to treat or prevent a disease is called as 'Ilaj-bit-Tadbeer wa Taghziya' (Regimenal Therapy and Dietotherapy). These therapies work on the principle of Ilaj-bil-Zid (Heterotherapy / Antagonist Treatment), just like Ilaj-bil-Dawa (pharmacotherapy). Though apart from Ilaj-bil-Zid, some other principles are also considered in Ilaj-bil-Ghiza according to quantity of diet such as fasting or consuming less quantity of food etc.<sup>[17]</sup> The concept of Asbab-e-Sitta Zarooriya revolves around the six essential causes for health which are necessary for the survival of a healthy body. These six essential causes or factors are Hawa (Air), Makool-o-Mashroob (Food & Drink), Harkat-o-Sukoon Badni (Body Movements and Rest), Harkat-o-Sukoon Nafsan (Psychic Movements and Rest), Naum-o-Yaqza (Sleep and Wakefulness) and Ehtebas-wa-Istafraah (Retention and Evacuation). These factors promote a good healthy lifestyle and maintain a proper ecological balance between body and environment.<sup>[18][19]</sup> For the prevention and control of Hypertension (Zightuddam Qawi), some non-pharmacological measures can be considered such as proper control of diet, exercise on regular basis, stress relief etc. Restriction of sodium in diet for all patients

while decrease in consumption of fats and calories in obese patients are important factors for management of Hypertension. Maintenance of normal body weight is very important in this disease. Regular physical exercise is also very useful though a complete lifestyle modification is necessary for the patients suffering from environmental and emotional stress. Lifestyle modifications including obesity correction, controlled restriction of salt in diet, restriction of alcohol consumption, giving up smoking, exercise and diet based on fruits and vegetables can all lower the blood pressure. Appropriate non-drug therapies may decrease the need of pharmacological agents in Hypertension.<sup>[11][20]</sup>

#### **Management Of Zightuddam Qawi (Hypertension) By Ilaj-Bil-Ghiza (Dietotherapy):**

There must be a proper restriction of salt in diet because salt promotes sodium retention in the body which is a prominent factor in etiology of Hypertension. Pickles, salty bakery products must also be avoided. Consumption of fat and calories must be decreased in diet. In mild Hypertension, 50-60 grams of protein can be consumed per day while in severe Hypertension protein consumption should not exceed more than 40 grams per day.<sup>[21]</sup> Adapting a DASH (Dietary Approach to Stop Hypertension) type dietary plan is also beneficial. Dairy products with low fats and diet rich in vegetables and fruits can be considered. Potassium and Calcium have good antihypertensive effect, therefore a diet plan with fruits, vegetables and low fat dairy products is a good option as fruits and vegetables are rich in Potassium while dairy products contain plenty of Calcium.<sup>[22]</sup>

In Unani system of medicine, there is a detailed classification of food explained for the maintenance of a good health. From this classification, we can consider following types of diet which are based on dairy products, fruits and vegetables.

1. Ghiza-e-Lateef Saaleh-ul-Kaimoos Qaleel-ut-Taghziya: e.g. Fruits.
2. Ghiza-e-Kaseef Saaleh-ul-Kaimoos Qaleel-ut-Taghziya: e.g. Indian Cottage Cheese.
3. Ghiza-e-Motadil Saaleh-ul-Kaimoos Qaleel-ut-Taghziya: e.g. Vegetable- Turnip.
4. Ghiza-e-Motadil Raddi-ul-Kaimoos Qaleel-ut-Taghziya: e.g. Vegetable- Cabbage.<sup>[23][24]</sup>

#### **Management Of Zightuddam Qawi (Hypertension) By Ilaj-Bit-Tadbeer (Regimenal Therapy):**

Ilaj-bit-Tadbeer is a popular method of treatment in Unani system of medicine. It includes application of few special techniques and physical maneuvers which improve body's constitution by removing morbid materials and improving immune system. The regimes used in Ilaj-bit-Tadbeer (Regimenal Therapy) are mostly non-pharmacological which modulate patient's lifestyle. Regimenal Therapy is basically based on modulation and modification of Asbab-e-Sitta Zarooriya (Six Essential Causes).<sup>[25]</sup>

Tadabeer (Therapies) which can be used in Zightuddam Qawi (Hypertension) are as follows:

1. Fasd (Venesection): This therapy is a type of Istafragh (Evacuation) where bloodletting is performed by carefully puncturing or cutting the vein. It is very useful in Imtila-e-Damvi (blood congestion).<sup>[26]</sup> In Hypertension (Zightuddam Qawi), venesection of Basilic Vein (Varid-e-Basaleeq) has been found useful.<sup>[27]</sup>
2. Hijamah (Cupping): This is an ancient way of treatment which is now practiced globally to treat various ailments. It has two basic forms namely dry cupping and wet cupping. In this therapy, few cups are placed on desired sites and vacuum is created by suction. Dry cupping is performed without scarification, while wet cupping is performed with scarification which is also a type of bloodletting.<sup>[28]</sup> In Zightuddam Qawi (Hypertension), wet cupping can be performed at the area around neck lateral to the cervical spine (bilaterally) on C3 and C4 level, bilaterally above the head of 12<sup>th</sup> rib on the back and at the triangular area formed by the border of ilium, spine and sacrum on the level of L2 to L3.<sup>[29]</sup>
3. Riyazat (Exercise): This therapy plays an important role in diversion and evacuation of morbid matters. Riyazat (Exercise) is used for prevention and treatment of many diseases. It improves metabolism, removes waste materials from the body, increases the tone of organs, improve or maintain flexibility in the body and it also relieves anxiety, insomnia, depression etc.<sup>[30]</sup> It is defined as continuous voluntary movements of the body in which an individual has to breath deep and rapid. 30 minutes of daily physical activity like brisk walking will burn 7 kcal per minute, which is total 210 kcal in 30 minutes. This burning of calories will be beneficial for reduction of obesity which will ultimately improve the healthy lifestyle status. Regular exercise improves arterial dilatation which reduces blood pressure, therefore Riyazat (Exercise) is considered as a curative therapy for hypertensive patients.<sup>[31]</sup>
4. Dalak (Massage): In this Regimenal therapy, body surface is rubbed with hands. It increases blood circulation and ultimately removes waste materials which detoxify the body. This therapy is considered as a type of Riyazat (Exercise) due to it's functions which have a close resemblance with the functions of Riyazat.<sup>[32]</sup> Stress and

tension are included in the multiple factors which predispose Hypertension. Some behavioral strategies relaxation techniques and massage therapy have been found effective in controlling stress which ultimately reduces Hypertension. Mohebbi Z et al, found in their study that back massage is effective in decreasing Hypertension.<sup>[33]</sup>

5. Hammam (Steam bath/ Turkish bath/ Sauna): Hammam is simply a type of hot bath which cleans the body as well as provide prevention and cure for humoral diseases. It is a combination of heat, steam and aromatherapy which helps in relieving stress, relaxation of muscles and stimulation of circulation. It evacuates morbid waste material from the body in the form of sweat ultimately providing detoxification of the body. A combination of Hammam, Exercise and proper diet also boost immunity. Modern procedures like Spa, Sauna and Aromatherapy, all resembles to Hammam.<sup>[34]</sup> A study by Mathieu Gayda et al shows that Sauna has positive effects in managing Hypertension. During the procedure and even two hours after the exposure of heat, it was found that total vascular resistance reduces due to Sauna.<sup>[35]</sup> H J Winterfeld et al found in their study that Sauna along with Walking/Running significantly reduces Hypertension.<sup>[36]</sup>

### Conclusion:-

Hypertension (Zightuddam Qawi) is a lifestyle disorder which induces various systemic complications in the body. After reviewing the literature of Unani as well as modern medical science we can conclude that harmony between Asbab-e-Sitta Zarooriya (Six Essential Causes) and the body will promote a good healthy lifestyle. Apart from this, non-pharmacological measures like Ilaj-bil-Ghiza (Dietotherapy) and Ilaj-bit-Tadbeer (Regimenal therapy) can also be considered for prevention and control of Zightuddam Qawi (Hypertension). In Ilaj-bil-Ghiza (Dietotherapy), decreased salt intake and adapting a diet based on fruits and vegetables can reduce blood pressure. In Ilaj-bit-Tadbeer (Regimenal therapy), procedures like Fasd (Venesection), Hijamah (Cupping), Riyazat (Exercise), Dalak (Massage) and Hammam (Steam bath/Turkish bath) are effective in controlling Hypertension.

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### Conflict of Interest:

None.

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