Hypertension in Unani System of Medicine

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Abstract

Unani scholars were all mindful of Zaght-e-damwi (blood pressure). They viewed Zaghta-e-Inqabazi as Systole and Zaghta-e-Inbesati as Diastole. The organs of dissemination have been portrayed by Ibn Nafees (1208-1289). The term hypertension or *Zaghtuddam Qawi* has not been used as such in any of the established Unani writings. Rather Unani physicians have described hypertension as *Imtila Ba Hasbil Auiya* and said this happens because of sue-e-mizaj damwi. They were aware of the hypertension, as they have discussed it in terms of giving a detailed account of its related symptoms such as migraine, palpitation, vertigo and epistaxis etc. Few of them described expanded blood volume in lumen of veins as the cause of hypertension. They further described that hypertension is an appearance of yabusat-e-mizaj (dryness of temperament) which is the primary cause of atherosclerosis (Tasallub-e-Sharaeen). Imtila has been mentioned as one of the reasons for *khafqan* (palpitation) and other disorders. Thus Imtila appears to be a correlate of hypertension. Later on Unani physicians coined the term *Zaghtuddam Qawi* for hypertension. Unani scholars appear to give vivid description of the circulatory disease determinants including hypertension however they were unable to assimilate their depictions to designate the malady. Imtila has been attributed to be associated with migraine, congested eyes, pulsatile conduits, puffiness of face, heavy head, anxiety, yawning, epistaxis, torpidity, flushing of face, warm body with no outside cause and ejections etc which are the symptoms and indicators of hypertension. The principle of treatment has been established by Unani physicians in the light of its physiopathology and the clinical features. There appears to be a great degree of similarity in Unani and that of modern concept of hypertension.

Key words: Zaghta-e-damwi, Hypertension, Zaghtuddam Qawi, Unani Medicine

Introduction

The term hypertension was first used by Harry Gold Ballet in 1934. However the Unani scholars (mainly Razi and, Majoosi) were well aware of the disease and its symptomatic manifestation although they did not give it a specific name. Rather they described it under a broad term of Imtila. They described symptoms such as headache, vertigo and epistaxis etc. of Imtila and explained it as vascular pressure caused by increase in blood volume and decrease in the lumen of blood vessels. Some of the scholars have also attributed hypertension to develop because of yabusat-e-urooq (Dryness of arteries). After Razi other Unani physicians including Majoosi, Ibn Sina, Ibn Rushd and Jurjani have also described and agreed with the Razi's description.

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As per Unani description Imtila is of following two types (Kabeeruddin, 1916; Ahmad, 1980):

(i) Imtila Ba Hasbil Auiya (repletion with respect to the vessels)

(ii) Imtila Ba Hasbil Quwa (repletion with respect to the vitality)

Imtila Ba Hasbul Auiya

Imtila-Ba-Hasbil Auyia indicates that the quality of humours is normal but the quantity has increased so much that the blood vessels have filled up overly and distended. It is an increase in blood volume leading to increased vascular pressure. Unani physicians have also attributed decrease in the lumen of blood vessels as a cause for increased vascular pressure. They have described heaviness of head and visual disturbances as the symptoms of Imtila and rupture of blood vessels in the form of epistaxis, hemoptysis and hemorrhage as its complications. Patients of Imtila with hemorrhagic tendency are advised timely venesection to decrease the blood volume and prevent the chances of hemorrhage which may result in sudden death. Light diet and rest is also advised to such patients.

Jalinoos (Galen) recommended venesection (fasad) for those patients who have symptoms like anxiety, excessive sleep and visualization of red objects in dream during sleep. The incidence of decreased lumen of blood vessels has also been mentioned by Ibn Rushd. He has described that callose (kaimoos) gets accumulated in blood in excess amount resulting in increased pressure and repletion of blood and ruh, causing general repletion of body. This type of Imtila is described to cause suda (headache), Imtela-e-chashm (eye congestion), puffiness of face, pulsatile arteries, dark coloured turbid urine, heaviness in head, restlessness, yawning, ruaaf (epistaxis), flushing of face, warm body. Ibn Sina has described this type of Imtila arise either due to strong retentive faculties (quwwat-e-masika) or weak expulsive faculties (quwwat-e-dafia). According to Ibn Sina and Majoosi, inordinate intake of food, consumption of alcohol, sedentary life and lack of exercise result in accumulation of waste products in our body leading to development of Imtila. It is usually seen in obese persons. Jalinoos recommended venesection (fasad) for those patients who have symptoms like anxiety, excessive sleep and observing red object in dream during sleep (Kabeeruddin, 1916; Ahmad, 1980; Razi, 1991; Kantoori, 1889).

Imtela Ba Hasbil Quwa

Imtila-ba-hasbil quwa is also called Imtila-ba-hasbul-kaifiat. In this type of Imtila along with redundant humours their quality is also affected. Morbid humours control the vitality of the body with their morbid nature and do not allow the normal processes of digestion and metabolism to be operated efficiently. Person

suffering from Imtila-ba-hasbil quwa are more prone to infectious disease (Shah, 2007; Kabeeruddin, 1930; Kantoori, 1896). It means that the resistance of the body becomes so weak that even small amount of morbid matter may produce toxicity. One feels heaviness and dullness in spite of absence of any apparent cause for the same. According to Majoosi, it occurs as a result of weakness of tabiyat due to which, food is not properly digested and morbid matters are formed causing heaviness and tiredness (Ahmad, 1980; Kabeeruddin, 1930).

Redundant intake of food and alcohol, physical inactivity and repose lead to accumulation of metabolic products which culminates into Imtila. It has also been described that Imtila is more prevalent in people with lean and asthenic built as their rate of absorption of metabolic products is more than their resolution.

Ibn Sina has described Imtila Ba Hasbil Auiya as quantitative enhancement of humours that over fills the vessels and causes their distension. He has also described it grievous as the blood vessels may rupture and humours may flow towards blocked passages resulting in the development of symptoms manifesting diphtheria, epilepsy and apoplexy etc like condition. He advocated venesection for such a condition. In Imtila Ba Hasbil Quwa both the quantity of humours and their morbid state cause the pathological condition. Such humours take the control of vitality of the body and affect the normal functioning of the body. A person suffering from this condition is at high risk of putrefactive diseases (Kantoori, 1896; Israeeli, 1907; Khan, 2004).

According to Ibn Rushd the increased volume of' intracellular fluid causes a state of Imtila. When it is associated with some degree of derangement in the temperament, it is called Imtela-Ba-Hasbul Quwa. A deviation in the temperament of blood is again a cause of Imtila. He has described signs and symptoms of this condition which are similar to those described by other Unani scholars. According to Razi in this type of Imtila, tabiyat becomes unable to do its work due to excess of blood. Quwwate ghaziya absorbs nutrients from the blood but Tabiyat fails to make it a part of the body and therefore leading to this type of repletion (Razi, 1991; Ibn Rushd, 1980).

Yabusat-e-Urooq (Dryness of arteries)

Blood pressure is inversely proportional to the power of radius of vessels, so a slight decrease in lumen of arteriole causes major change in blood pressure and the increase in the peripheral resistance directly increases the blood pressure. A number of factors have been described to be responsible for decrease in the lumen and increase in the peripheral resistance. Hypertension is more prevalent in elderly (>60 yrs) because of yabusat-e-urooq (Dryness of arteries) which has been described to be more prevalent in elderly people (Kausar, 1984). Razi described yabusat (dryness), Khilqi Tazaiyuq e-Shiryani (Congenital narrowing

of arteries) and Hararat (Temperature) as the causes of rapid pulse. Ibn Rushd says that the dryness is a factor for narrowing of blood vessels. The diameters of blood vessels in different temperaments are described to be Hot-wet > Hot-dry > cold-dry.

Ibn Nafis (1438 A.D) has discussed that Nabze-Sulb (Rigid pulse) is produced due to yabusat (dryness). In obese persons, the lumen of arteries is smaller and heart rate is faster (Ibn-e-Rushd, 1980). The prevalence of hypertension is greater in obese people due to inordinate adipose tissue and increased dryness.

Basheezak

It is a term described by Razi in Al-Hawi (Razi, 1997). The symptomatic manifestation of Basheezak is redness of eyes and tension in blood vessels, which reflect hypertension. He has described the management of Basheezak as deep sleep, fasad (Venesection) and use of Mushilat-e-Safra drugs (Purgatives of yellow bile). This term appears to denote a peculiar type of hypertensive state which may be useful in clinical practice though any correlate of this terminology has not been described in conventional medicine.

Determinants/ Risk Factors

Consistency of blood (qiwamuddam) makes the fringe resistance along these lines the circulatory strain is kept up which results proficient flow of blood. Ibn Abbas said that the qiwamuddam of the venous blood is higher than the blood vessel due to weight pressure of Bukharat-e-dukhania (CO_2) in the blood (Kantoori, 1889). Whether pulse is high, low or normal it relies upon a few variables i.e. the yield from the heart, the resistance of the blood stream to the blood vessels or the volume of blood and blood circulation to different organs. These are brought about by the impingement of the six essential components of health.

Etiology

Majoosi is of the view that Imtila is brought about by over the top intake of nourishment and liquor and lack of physical exercise and evasion from hammam (wet and steam shower). Natural components embroiled in the causation of hypertension include umoor-e-nafsania (push, outrage and nervousness etc), corpulence and derangement of temperament.

Pathophysiology

As indicated above, because of a state of abnormality in veins; their constriction and unwinding Imtila may develop. It has been further argued that Muhraraq Sauda prompts to yabusat, which in turn causes salabat (solidness) in vessels, causing their constriction and unwinding. In case the sauda is rotted, it will increase in amount and will create more solidness because sauda is assigned

to possess relatively more yabusat (Khan, 2004). Quwate Masika (retentive power) responsible mainly to constrict the vessels is intervened with burudat and yabusat (Israeeli, 1907). The reason of narrowing and shutting of waterways and pathway have been described to be due to the predominance of the Yabis Mizaj of the body. In case Su'e Mizaj Yabis prevails over the body, it may solidify the vessels. Shutting of waterway is either because of increased Quwate Masika or decreased Quwate Dafia (expulsive power). Afaale-nafsania, for example, outrage, uneasiness, pressure etc are the manifestations of hararat and yabusat (Kantoori, 1896). In nabz-e-sulb (hardn pulse), salabat (sclerosis) in the nabz is found because of dryness. Thus the blood vessel firmness predisposes the hypertension, as it diminishes the limit of withdrawal and unwinding. Increment in burudat, yabusat and quwate masika brings about the blood vessel firmness. An increase in muhtaraq or putrified auda because of any reason induces yabusat. Tabri has mentioned that Mizaj of vessels in ordinary condition remains Ratab. However, in hypertension it is found strayed from Ratab to Yabis and contributes significantly to give rise to hypertension.

Clinical Features

A comparison of clinical features of Imtila and hypertension indicates that the symptoms described in respect of the two are almost similar. The comparison has been summarized in the table given below:

Symptoms	Hypertension	Imtila
Headache	+	+
Palpitation	+	+
Dizziness	+	+
Breathlessness	+	+
Fatigability	+	+
Epistaxis	+	+
Blurring of Vision	+	+
Redness of face	+	+
Confusion	+	+
Chest pain	+	–
Diaphoresis	+	–
Fullness of pulse	+	+
Weakness	–	–
Hot touch of skin	–	+
Loss of appetite	–	+
Yawning	–	+
Constrained speech	–	+
Nightmares	–	–

It is evident from the description mentioned in Unani literature that hypertension is a damvi (sanguine) disease. The sign and symptoms of Hypertension can be compared with the sign and symptoms of imtela-e-urooq and yaboosat-e-urooq (Fullness and Dryness of arteries). Classical Unani physicians were well aware of the manifestations of imtila-e-urooq and its management, though they have not mentioned the term hypertension as such. Rather some of the physicians especially Razi and Ibn Sina have described a new term Basheezak for raised blood pressure mainly caused by narrowing of blood vessels (Imtila Ba Hasbul Auiya) (Ibn Rushd, 1980; Razi, 1997; Tabri, YNM; Ibn Sina, 1930; Jurjani, 1903; Mehta, 1998; Golwala & Golwala, 1992; Kumar & Clark, 2009; Ansari, 1930)

Management

The term hypertension is not mentioned as such in classical Unani literature but clinical features representing hypertension have been mentioned under Imtila Ba Hasbul Auiya.

As per Unani concept the principle of management is to reduce Imtila by decreasing the blood volume. This principle can be achieved by giving non-pharmacological regimen as well as pharmacological interventions. A number of drugs have been mentioned in the treatment of hypertension which contributes to alleviate the symptoms in many ways like mufatihaat (vasodilators), munawimmat (hypnotics), musakkinat (relaxant) and mudirrat (diuretics) etc (Kabeeruddin, 1916; Kantoori, 1889; Ahmad, 1983).

Line of Treatment

Ilaj Bil-Ghiza (Dietotheraphy)

Ilaj Bil-Tadbeer (Non-pharmacological therapy)

Ilaj Bil-Dawa (Pharmacotherapy)

Ilaj Bil-Ghiza (Dietotheraphy)

There is a vivid description of dietary recommendations in Unani medicine for the patients of hypertension. The group of dietary supplements that control common risk factors such as hyperlipidaemia, atherosclerosis and anxiety are commonly recommended for improving the state of hypertension and its complications. There is a large list of dietary substances which are considered to be anti-hyperlipidemic, anxiolytic and exhilarants.

Lehsun (*Allium sativum*); Pyaaz (*Allium cepa*); Zeera siyah (*Carum carvii*), Anannas (*Annanas sativus*), Seb (*Malus sylvestris*), Kadu (*Cucurbita moschata*), Gajar (*Daucus carota*), Khubani (*Prunus armeniaca*), Tarbooz (*Citrulus vulgaris*), Anar (*Punica granatum*), Kharpaza (*Cucumis melo*), Toot (*Morus indica*), Pista (*Pistacia vera*) are some of the dietary substances that are useful to manage Imtila or hypertension (Razi, 1991; Tabri, YNM; Ibn Sina, 1903; Khan, 1286H).

Ilaj-Bil Tadbeer (Non-Pharmacological therapy)

Ilaj Bil Tadbeer involves the modification of Asbab-e-Sitta Zarooria (six essentials of healthy living). It is very helpful in prevention as well as control of high blood pressure. A significant diminution of risk factors has been observed after strictly following the regimens of maintaining Asbab-e-Sitta Zarooria including adequate sleep, increase in physical work, stress free life etc. Following are some regimenal therapies prescribed by Unani scholars in the management of high blood pressure (Razi, 1991; Tabri, YNM; Ibn Sina, 1930):

Fasad (Venesection)

Tareeq (Diaphoresis)

Ishaal (Purgation)

Taleeq (Leeching)

Ilaj Bil-Dawa (Pharmacotherapy)

Looking at various aspects of high blood pressure, several single drugs and compound Unani formulations have been describe which are in use since centuries for successful management of hypertension (Kabeeruddin, 1916; Ahmad, 1980; Kantoori, 1889; Ahmad, 1983). These are as follows:

Munawimmat (Hypnotics)

- Akseer-e-Shifa
- Roghan-e-laboob Saba
- Tukhm-e-Khashkhas (seeds of *Papaver sominiferum* Linn)
- Roghan-e-Khashkhash (oil of *Papaver sominiferum* Linn)

Mubarridat (Refrigerants)

- Kishneez (*Coriandrum sativum* Linn)
- Gul-e-Neelofar (*Nymhaea lotus*)
- Tukhm-c-Kahu (*Lactuca sativa*)
- Tukhm-e-Khurfa (*Portutaca oleracea* Linn)

Mufattihat (Vasodilators/deobstruent)

- Arjun chaal (*Terminalia Arjuna* Linn.)
- Lahsun (*Alium sativum* linn.)

Musakkinat (Relaxants)

- Sankhahuli (*Convolvulus pluricaulis* Choisy)
- Asrol (*Rauwolfia serpentina*)

Tukhm-e-Kahu (*Lactuca sativa* Linn)

Gul-e-Neelofar (*Nymhaea lotus* Hook F. & Thumb)

Mufarrehaat (Diuretics)

Sandal Safaid (*Santalam album*)

Parsiyoshan (*Adiantum capillus veneris* Linn)

Abresham (*Silk coccon*)

Khas (*Andropogon muricatus* linn)

Mudirrat (Diuretics)

Sharbat Bazoori Mautidil

Habb-e-Mudir

Tukhm-e-Kharpaza (*Cucumis melo* Linn.)

Tukhm-e-Khayarien (*Cucumis sativus* L.)

Conclusion

Hypertension as such has not been described as such in Unani medicine however the disease and its attributes including its clinical features, symptoms and management etc were known to Unani physicians. It has been mainly described in terms of Imtila and has been characterized to be a Damwi disorder. Its three important attributes are increased blood volume, expanded volume consistency and thickening and solidifying of vessels (arteriosclerosis). These are almost similar to that described in conventional medicine in respect of hypertension. Similarly, the principle of treatment with minor divergence also appears to be same. Some of the attributes such as Basheezak and a number of drugs used in Unani medicine to control hypertension must be looked in to afresh to find out a degree of consonance if any between two. This may exposed a new frontier for research as well.

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