



Tibb Position Statement: Hypertension and Tibb

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Sept 2016

Keywords: Blood | Pressure | Hypertension | White coat | Cause |Types | Tibb | treatment | Natural | Conventional | Adverse reactions | Herbal | Integrative

Abstract

The nature of blood and its many roles in the human body has always occupied a central position in Tibb. Whether it is its relationship to humours and faculties, or its functions in maintaining metabolic harmony, blood is critically important in health and disease. This article examines the role of blood pressure in our body, and how hypertension, or constantly excessive high blood pressure, can have serious, even devastating, health outcomes. Dealing with this from a Tibb perspective is examined, especially the role of diet, exercise and other lifestyle factors and personal habits, and how herbal remedies and other natural ways of restoring normal blood pressure can be usefully applied. Similarities and differences to conventional medicine in each area are made throughout.

Overview

Persistent abnormally high blood pressure, or *hypertension*, is a common, chronic disorder which poses a major healthcare challenge. It can have a marked impact on the lives of those who suffer from it, often placing a tremendous social and financial burden on them. The consequences of untreated hypertension over time can be stark and life changing. It is a major threat to health because it may inflict serious damage on many of the affected person's organs. For example:

- The blood vessels of the *brain* may block or burst, leading to a *stroke*.
- The *heart's* efficiency may decrease over time, leading to *heart failure*.
- The *kidney's* blood supply and structure may be affected badly, leading to *kidney failure*.
- It may affect the *eye*, leading to deteriorating vision.
- It may also lead to poor blood circulation in the *legs*, leading to *pain when walking*.

It is very prevalent in South Africa. The main drivers behind its alarming rise in prevalence – it affects between a quarter and a third of adults – are the continuing urbanisation of our people; our increasingly passive, or sedentary, lifestyle, which favours unwelcome weight gain; and major changes in our daily food intake, especially in the consumption of energy-dense processed food, high in sugar, fats and salt.

Most cases of hypertension fall into the borderline, mild or moderate categories. An accurate diagnosis is often complicated by the phenomenon of *White Coat Hypertension*, which can lead to unnecessary therapy. From the Tibb perspective, sanguinous hypertension accounts for the vast majority of cases.

Conventional medicine generally favours the use of potent drugs to reduce blood pressure. However, advocates of Tibb and other forms of natural healing prefer lifestyle modification as the major route to follow. It reasons that as abnormally high blood pressure is largely the outcome of a faulty way of life, so improving the person's lifestyle should both prevent and alleviate the disorder. Relatively simple measures, such as preferring healthier food and drink rather than processed foods, controlling body weight, encouraging more physical activity, resting properly, and reducing stress levels by various techniques, are effective in the majority of cases.

In this Tibb Statement we examine the nature of hypertension from both the conventional (Western, allopathic) medicine and the Tibb healing perspectives, placing special emphasis on its origin, prevention and treatment.

Blood – the “Liquid of Life”

Nature. Blood circulates throughout the body in order to maintain the inner harmony necessary for life. It is a complicated substance, made up of a number of different types of cell suspended in *plasma*, a viscous fluid. It transports a large variety of different substances, especially oxygen and nutrients, between all living cells, tissues and organs, and returns carbon dioxide and metabolic waste products to the *excretory organs* for elimination. Blood is carried throughout the body in specialised tubes, or blood vessels. These are the *arteries, arterioles, veins* and *capillaries*, which make up the *vascular system*.

Composition. Blood cells are a mix of red blood cells (*erythrocytes*), white blood cells (*leucocytes*), and platelets (*thrombocytes*). They make up around 40% of the blood volume, with plasma the rest. When blood clots, the remaining liquid is *serum*. The function of the red blood cells is to carry oxygen, while the white blood cells are an important part of the body's immune system. The platelets are involved mainly in blood clotting.

Role. Blood removes waste products (*toxins*) by transporting them from all the body's tissues to the excretory organs where they are removed from the body via sweat (the skin), the kidneys (urine) and the liver (digestive system).

Circulation. Blood is pumped under pressure from the heart into the major arteries, and then on to all the body's tissues. As they move away from the heart, the arteries become smaller arteries, then arterioles and capillaries. Resistance to blood flow is mainly due to constriction of the muscle-lined arteries and arterioles. Depleted blood returns to the heart via the major veins and venules. The pumping of blood against resistance creates a pressure – so-called blood pressure

The Tibb view:

- ***The circulation of blood was discovered by early pioneers of Tibb, including Ibn Sina***
- ***Tibb accepts that blood circulation is essential to provide nutrients and remove toxins***
- ***Tibb differs from conventional medicine in many ways. Two of these are the concepts of humours and faculties.***

Humours

In Tibb there are a number of humours, or fluids, in the body, which are essential for the living processes. The four main ones are: blood (*sanguinous*), phlegm (*phlegmatic*), yellow bile (*bilious*) and black bile (*melancholic*). Each

has elemental qualities associated with it; blood in particular is linked to the qualities of heat and moistness. Each person has a humoral balance which changes at different times and situations in terms of amount, proportion and distribution of each humour – the humoral or qualitative balance.

Tibb differs from conventional medicine in recognising disease as an outcome of a humoral imbalance. Their amounts, proportions and distribution determine the state of health or disease the person is in. It does however accept conventional terminology as a more convenient and acceptable way of describing a disease.

Faculties

Blood is also central to the Tibb concept of faculties. There are three of these: the vital, the metabolic and the psychic. The vital faculty is driven by the heart, unlike the metabolic faculty (the liver) and the psychic (the brain). The vital faculty is the one responsible for maintaining life, using the circulating system as the means of delivery. It also controls respiration and the immune system, which both work in partnership with the cardiovascular system.

Blood pressure

Blood pressure is the pressure exerted by the blood within the blood vessels after it is pumped out by the heart. As the blood travels along the blood vessels, blood pressure gradually falls, and by the time it reaches the capillaries it is almost zero. In a healthy person, blood pressure is kept at levels which make sure that the body's organs and tissues receive all the blood they need to work properly.

Blood pressure rises as the heart contracts, and falls as it relaxes. The rise and fall in blood pressure creates the pulse - an "echo" in the arteries. This changes quite a lot during the day, depending on the person's activity, state of health and mental stress load. This is quite normal.

Blood pressure is the result of four dynamic factors:

- The **volume of blood** in circulation. This varies constantly, and can fall due to dehydration or internal bleeding.
- The **resistance to blood flow**, which is determined by the inside diameter of blood vessels, especially the minor arteries and arterioles. This rises with ageing in most people.
- The **force of expulsion of blood from the heart**. This is a measure of the heart's efficiency. This falls with ageing, dehydration and the action of certain drugs.
- The **viscosity of blood**. The thicker the blood, the slower the flow.

Changes to any of the above factors may lead to a rise or fall in blood pressure. However, the person's Physis compensates by making opposing changes to one or other factor, so keeping blood pressure in harmony with the body's needs.

Blood pressure rises and falls in response to changes in:

- **The excretory system** – by increasing or reducing the removal of water and electrolytes from the body via the kidneys.
- **The endocrine system** – by increasing or decreasing release of the powerful vasoconstrictor angiotensin from the kidneys, or that of adrenaline from the adrenal medulla gland.
- **Calcium ion intake** – by facilitating or blocking the passage of calcium ions across the cell membranes of smooth muscle cells of blood vessels, so affecting resistance to blood flow.

The Tibb view:

- *Tibb notes that blood has to be under considerable pressure to reach all parts of the body in order to maintain metabolic and qualitative harmony.*
- *Physis changes blood pressure according to the changing needs of different tissues and organs*

Measuring blood pressure

A person's blood pressure is generally measured in the large artery of the upper, usually left, arm, which is the nearest and most accessible one to the heart. It is taken, or read, with a *sphygmomanometer*, either automatically or manually, or combined with a *stethoscope*. This detects the presence or absence of a pulse beat.

The units of blood pressure are millimetres of mercury (mm Hg). Someone with normal BP will have a reading of 120 over 80 mm Hg,

The measurement of blood pressure is non-invasive, and little discomfort is experienced. Blood pressure measurement is relatively easy, and need not be taken by a doctor or nurse – a person can take his or her own readings, especially now that reliable and affordable devices are available OTC.

Blood pressure can be monitored accurately and economically throughout the day with an Ambulatory BP Monitor. A device is attached to the upper arm, and takes blood pressure readings automatically during the day and night at specified intervals.

The Tibb view:

- *Tibb advises that BP should be read two or three times, as one reading is of little use clinically, and can be deceptive if there is an instrument fault.*
- *Tibb regards BP self-reading in the relaxed and non-threatening setting of the home as a good way of counteracting “White Coat Hypertension”.*
- *Self-reading BP also helps the “buy-in” to, and compliance with, any prescribed treatment.*
- *Tibb accepts that ambulatory blood pressure measurement is the most reliable way of avoiding misdiagnosing hypertension, and the costs of treatment, monitoring and mental stress that misdiagnosis entails.*

When blood pressure is taken, three measurements are noted:

- The **systolic pressure** - the blood pressure at its very highest, when the heart has contracted fully. It is at the instant of maximum force during the contraction, and when the heart's left ventricle contracts.
- The **diastolic pressure** - the blood pressure at its very lowest, between two heartbeats. It is at the instant of maximum relaxation, when the left ventricle is filling with blood for the next heartbeat.
- The **pulse** – the rate (as beats per minute) at which the heart contracts.

The Tibb view:

- *Pulse diagnosis is an age-old tradition, and is an important part of Tibb diagnosis.*
- *It provides much more clinical information compared to conventional medicine.*
- *In Tibb practice, it can reveal other co-existing clinical disorders, and indicated the patient's overall state of health.*

Measuring blood pressure in practice

- The person relaxes while sitting for about 10 minutes before the blood pressure is taken.
- Blood pressure can be measured in either of the upper arms, but using the same arm every time.
- The cuff is inflated, and the pressure is noted on the sphygmomanometer or meter.
- The cuff pressure is released slowly. When the pressure reaches the systolic value, a noise is heard via the stethoscope. When the diastolic value is reached the noise disappears.
- Both systolic and diastolic blood pressure values are recorded, together with the heart rate as pulse beats per minute.

Normal blood pressure

Rule of thumb: A BP reading below 120/80 mm Hg is regarded as normal in a resting person. If above 160/90 mm Hg

Blood pressure varies from person to person, as we all have different temperaments which makes us unique. What is normal for one person may be high for someone else of a different temperament. What is normal for a pregnant or elderly lady is not normal for a young man. It also gets higher as we get older.

In conventional medicine hypertension has different degrees of severity – mild, moderate, severe and malignant (*see table below*).

RANGE of blood pressure	SYSTOLIC	DIASTOLIC
Low blood pressure	Less than 105 mm Hg	Less than 70 mm Hg
Normal range / low	105 mm Hg	70 mm Hg
Normal range / average	120 mm Hg	85 mm Hg
Normal range / high	135 to 139 mm Hg	85 to 89 mm Hg
Borderline	140 to 149 mm Hg	90 to 94 mm Hg
Mild hypertension	150 to 159 mm Hg	95 to 99 mm Hg
Moderate hypertension	160 to 180 mm Hg	100 to 110 mm Hg
Severe hypertension	More than 180 mm Hg	More than 110 mm Hg
Malignant hypertension	More than 200 mm Hg	More than 140 mm Hg

Prevalence of hypertension

Up to a quarter of the South African adult population has it. However, only about one-third of people with hypertension are detected. Also, only about one-quarter of people with hypertension are actually being treated. And only a small percentage of these are successfully treated over time.

High blood pressure is linked to:

- (a) The person's **temperament** – whether dominant or sub-dominant sanguinous, phlegmatic, bilious or melancholic.
- (b) The quality of the **lifestyle** the person pursues – how he or she adheres to important lifestyle factors.
- (c) the person's **age**. Rising blood pressure becomes more common as a person gets older

Hypertension appears most often in adults over 40, especially males. Children rarely get the disorder. It affects city dwellers more, with up to 25% of some populations affected at any given time. More and more people are developing high blood pressure because of changes in their diets, behaviours and habits.

White coat hypertension

Background. Until a century or so ago, doctors, and surgeons plied their trade in normal daytime attire. Only relatively recently did they adopt the now traditional white coat. So someone carrying out a procedure such as taking blood pressure usually wore a white coat.

White coat hypertension (WCH) refers to the marked rise in a person's blood pressure brought on by the very act of someone – doctor or nurse – taking their blood pressure. For many people, having blood pressure taken can be stressful and can provoke serious anxiety. The blood pressure – both systolic and diastolic – is substantially higher (10 to 30 mm Hg, perhaps more) than it should be. This is very common in a clinical environment, and even during a domestic house call.

The Tibb view:

- *Tibb views white coat hypertension as a prime example of a Physis response.*
- *It is brought about by emotional disharmony - anxiety or fear about the procedure or its finding.*
- *The presence of a stranger - doctor or nurse - aggravates the disharmony.*
- *It is also aggravated by ignorance or powerlessness about the procedure.*
- *WCH is a 'false positive' result from a clinical measurement.*

Impact. If the person's blood pressure is normal or close to it, the WCH effect is probably unimportant. But if it is borderline or higher than normal, the additional increase may tip the person's blood pressure reading into a different degree of severity. It may be recorded as mild instead of normal, or severe instead of moderate. This effect brings implications of more intensive treatment, monitoring and cost (drugs, doctor visits and emotional impact).

Variability. Blood pressure rises and falls during the day, from time to time, in response to the body's particular requirements at the time, those of individual organs and tissues, and what is happening in the immediate environment. Understandably, most people feel tense or anxious when having blood pressure taken by an unfamiliar person – doctor, nurse or other healthcare worker. This effect is even more pronounced when the reading is done in a sterile, clinical setting.

Response. Some people will show the WCH effect more than others. This reflects the temperament, of the person being examined. It often occurs in people already receiving treatment for hypertension, as they may be anxious to show good compliance with the doctor's instructions, or wish to avoid additional drug treatment. One way of reducing it is to take measures to reduce anxiety, such as resting before the reading is taken.

The Tibb view:

- *Tibb notes that WCH occurs most in people with a predominantly bilious temperament and least in those who are predominantly phlegmatic.*
- *Tibb feels that healthcare practitioners should be aware of this effect, otherwise it can condemn a person with borderline or mild hypertension to a lifetime of costly and unnecessary drug therapy.*
- *Tibb recommends that we keep a personal record of our blood pressure, as it helps to commit to valuable treatment.*
- *Tibb recommends breathing exercises before having the blood pressure taken, in order to reduce anxiety.*
- *Tibb suggests regular blood pressure checks, ideally through home readings. This good habit reinforces commitment to treatment, if any.*

Action. WCH can be recognised by comparing a blood pressure measurement in the clinic with that taken in the tranquil home environment. This comparison is, however, not foolproof, as the person's blood pressure can fluctuate markedly in a short space of time. By far the best way to measure blood pressure is by **ambulatory blood pressure monitoring** throughout the day. This shows unambiguously the pressure at different periods over 24 hours, day and night. This provides firm evidence of whether or not someone has hypertension, and how severe it is. Most clinics or surgeries provide this service.

The Tibb view:

- *Tibb strongly advises that someone with a high blood pressure reading should have this confirmed independently, otherwise he or she may be the unwitting victim of the White Coat Syndrome. This can lead to long-term unnecessary drug treatment for non-existent hypertension.*

Consequences of high blood pressure

People with high blood pressure may complain of headaches, nose bleeds, dizziness and breathlessness. However, it is usually without symptoms in the early stages – hence the dramatic label: “*the silent killer*”. An isolated episode of high blood pressure is in itself not particularly dangerous, as in physical exercise or emotional tension. It is not life-threatening until it persists abnormally high. In fact, someone with high blood pressure may actually feel very well, because well oxygenated blood is reaching the brain in plenty.

However, over the months and years, if a person with genuinely high blood pressure is not treated properly, serious physical damage will most likely appear.

- The heart and arteries become overloaded, which seriously damages the circulatory system. The part of the heart which does the pumping into the general circulation becomes enlarged, as it has to work harder to supply blood the body demands. This gives rise to *left ventricular hypertrophy*.
- The person may develop chest pains (*angina*), have a heart attack.
- A blood vessel may rupture in the brain, resulting in a stroke (a “brain attack”).
- His or her kidneys may begin to fail, leading to the build-up of toxins throughout the body.
- Problems may develop in the legs' blood circulation due to peripheral artery disease, making walking an ordeal.
- The eyes may be affected, leading to blurred vision.
- The person's blood vessels, especially in the heart and arteries, may be damaged, becoming stiff and brittle as fatty deposits are laid down, making the formation of blood clots likely. Coronary heart disease is usually the result, followed by chest pains and a heart attack.

Types of hypertension

According to Tibb, there are two main types of hypertension:

Hypertension due to an imbalance with Hot and Moist qualities (sanguinous form)

This is the most common imbalance found in hypertensive people. People who have a dominant or sub-dominant *sanguinous* temperament are at greatest risk. The imbalance in this type of hypertension shows up as an increase in the body's volume of blood in circulation.

This form of hypertension results from the person consuming excessive amounts of Hot & Moist food and drink, as well as improper management of the Lifestyle Factors, which leads to excess of Hot & Moist qualities.

From the Tibb perspective, people with a *sanguinous* temperament are more inclined to the more common form of hypertension (*essential hypertension*).

Hypertension due to an imbalance with Cold and Dry qualities (melancholic form)

This type of hypertension, also called resistance hypertension, is usually found in those who have a *melancholic* dominant or sub-dominant temperament. It arises from a person having a melancholic (Cold & Dry) imbalance in the vascular system, and is due mainly to the person consuming too much Cold & Dry foods and drinks, as well as improper management of the Lifestyle Factors which leads to an excess of Cold & Dry qualities.

According to conventional medicine, there are also two main types:

Essential (or primary) hypertension. The cause of this type of hypertension has not been identified. This is the most common type, accounting for around nine out of ten cases.

Secondary hypertension. This results from an identified disorder like kidney disease or atherosclerosis, or from pre-eclampsia which can arise during the course of pregnancy, or as a side effect of certain drugs.

Causes of high blood pressure

The Tibb view. High blood pressure does not develop overnight. The processes leading to hypertension begin long beforehand. The underlying primary cause is in most cases a faulty lifestyle. Minor, probably unnoticeable, faults in the Lifestyle Factors gradually accumulate, and blood pressure rises in parallel. The person's Physis becomes weaker with age, and is less and less able to counteract the consequences of the person's poor lifestyle. Eventually hypertension develops, symptoms may or may not appear, and the risk of a cardiovascular accident rises.

Tibb has identified one outcome of these changes – a gradual increase in the volume of blood in our circulation system. This is responsible for the rise in blood pressure. This type of hypertension affects the majority (~80%) of people who actually develop hypertension.

Hypertension and temperament. From the Tibb perspective, people with one particular type of temperament – the *sanguinous* form – are more inclined to the more common form of hypertension (*primary* or *essential hypertension*). This type of hypertension is the result of an increased volume of blood.

As hereditary factors play an important role in determining temperament, it is understandable that persons with parents who have histories of hypertension would be more likely to also develop hypertension.

This is known as *resistance* or *secondary hypertension*.

Hypertension and the Lifestyle Factors. These play a major role in the development of hypertension in people who have a dominant *sanguinous* or *melancholic* temperament. Unwise eating habits, constantly stressful living,

lack of physical exercise, breathing poor quality air, a build-up of toxins, and habits like smoking and abusing alcohol all contribute to the development of high blood pressure.

Determining the exact cause of *resistance* or *secondary* hypertension, which is generally associated with kidney and hormonal disorders, is not easily done. However, from the Tibb perspective, the rationale behind secondary hypertension being associated with the hardening of the arteries is easy to understand.

Hypertension often affects pregnant women due to fluid accumulation caused by hormonal disharmony

People who generally have a dominant or sub-dominant *melancholic* temperament are more predisposed to secondary hypertension, which is linked to progressive hardening of the arteries.

Risk factors for high blood pressure. Several aspects of lifestyle play a role in the onset of abnormally high blood pressure:

- An **inadequate daily diet** of salt- and sugar-rich processed foods.
- Low levels of **physical activity** – sedentary work, “couch potato” existence.
- Living with **unresolved stresses** – excessive and continuous emotional and/or physical stress.
- Being **overweight/obese** – higher blood pressure is needed to provide the nutrients the extra tissue demands.
- Poor **sleep quality** – especially sleep apnoea, which affects hormonal harmony.

There are also a number of personal habits which can aggravate existing high blood pressure:

- Too much **alcohol** – especially binge drinking, or more than 3 to 4 drinks daily.
- **Smoking** cigarettes – the nicotine constricts blood vessels.
- Adding **salt and taste enhancers** to meals – the kidneys cannot handle the added salt load.
- Illicit **street drugs** – especially ecstasy and cocaine.
- Using certain **legal drugs** – especially colds/flu remedies and some forms of oral contraceptive.
- Using **plastic** food holders – toxins in the plastic have been linked to raised blood pressure.

There are a number of clinical disorders which can lead to resistance or secondary hypertension:

- **Diabetes mellitus** – the damage to the kidneys and nerves provokes a rise in blood pressure.
- **Thyroid** problems – an over-active thyroid often brings on a rise in blood pressure.
- **Cushing’s syndrome** – which can develop through corticosteroid drugs abuse.
- **Primary aldosteronism** – linked to up to 15% of high blood pressure cases.
- Problems with the **adrenal glands** – this leads to over-secretion of the stress hormones.

The conventional medicine view. As mentioned earlier, the cause of hypertension in most people (around 90%) is still unknown, in spite of the huge investment made in time, effort and money in identifying the reason(s). A small proportion of hypertensive people (around 10%) develop the condition as a result of kidney damage, hormonal disorders, or the hardening of the arteries due to fatty deposits (*atherosclerosis*).

Not long ago it was thought that a gradual rise in blood pressure was a normal, unavoidable consequence of ageing, necessary to drive blood through increasingly older and brittle blood vessels. However, it does not occur in many people in different communities. It increases in most cases, usually as the outcome of a changing way of life.

Conventional medicine accepts that high blood pressure cannot be cured in most cases. It can, however, be managed very effectively through a wide range of drugs, used either singly or in combination. Lifestyle changes are acknowledged as potentially capable of lowering blood pressure to a degree, but enthusiasm for applying these is at best lukewarm. It is not part of (most) medical schools' curriculum, and generally consists of losing excess body weight, consuming less salt and fatty foods, and stopping smoking.

Herbal remedies for hypertension

Several herbs are effective in reducing excessively high blood pressure. Different hypertensive people have different temperaments and different causes of their disorder. Depending on whether the increase in blood pressure is due to excess *volume* (Hot & Moist qualities) or due to increased *resistance* resulting from the narrowing of arteries and arterioles, the choice of the appropriate herb/s is made. In addition to the pharmacological action of reducing blood pressure, recognition of the herb/s temperament is made. For volume related hypertension (Hot & Moist), herbs with an overall Cold & Dry temperament are prescribed. Similarly for hypertension resulting from narrowing of arteries (Cold & Dry), herbs with an overall Hot & Moist temperament are prescribed. One herb may be more effective and better tolerated than another, so several available options need to be tried before settling on one particular.

Listed below are some herbs that have anti-hypertensive pharmacological actions which can be used individually or in combination. In addition the temperament of the herb is also included. They can also be combined effectively with conventional drugs, although care should be taken to avoid a herb-drug interaction.

Garlic. Regularly eating raw, cooked or roasted garlic reduces raised blood pressure. It helps to regulate blood pressure by relaxing blood vessels so that they dilate. In addition, it helps in boosting blood flow, controlling infections, and reducing high cholesterol.

Temperament: *Hot & Dry*

Ginger helps to control blood pressure and improve blood circulation by relaxing constricted arteries. It is used routinely in many Eastern sweet or savoury recipes and in beverages. It has added value in people with simultaneous Type 2 diabetes, as it increases the uptake of glucose into muscle cells.

Temperament: *Hot & Moist*

Cinnamon consumed daily lowers blood pressure, particularly in those with co-existing diabetes. It is a pleasant flavour-enhancing herb, and easily taken in sweet and savoury foods, and in coffee.

Temperament: *Dry & Hot*

Cayenne pepper contains capsaicin. This substance is known to reduce elevated blood pressure rapidly. Dosage has to be accurately determined because of possible side effects.

Temperament: *Hot & Dry*

Flaxseed contains omega-3 fatty acids which are potent anti-oxidants and proven blood pressure reducers. It also protects against cardiovascular disease in general, improves glucose tolerance in diabetic patients, and reduces cholesterol levels. It is a versatile herb, and compatible with most foods.

Temperament: *Hot & Dry*

Hawthorn berries. Used for many centuries as a tea in traditional medicine, this appears to have a marked beneficial effect on high blood pressure, blood clotting disorders and blood circulation.

Temperament: *Hot & Moist*

Celery seed. This herb is commonly used to enhance the flavour of many foods. As it has a marked diuretic action it is effective in reducing primary hypertension.

Temperament: *Hot & Dry*

Rauwolfia serpentina. The plant contains a number of alkaloids including reserpine. This plant has been used for centuries in the treatment of hypertension, and probably acts by reducing stress and anxiety.

Temperament: *Cold & Dry*

Tibb management of hypertension

Treatment of hypertension with herbal medication as well as wet cupping has been a successful protocol for many centuries. In addition appropriate lifestyle measures are an integral component of managing hypertension to support Physis and restore humoral imbalance. The raised blood pressure, which is a symptom of an underlying lack of qualitative balance, will gradually fall.

Sanguinous hypertension

This condition is associated with *Hot & Moist* qualities, so treatment involving the Lifestyle Factors should reduce excess heat and/or moistness characteristic of this form of hypertension.

Food and drink

The person should be encouraged to:

- Consume mostly Cold & Dry foods followed by Hot & Dry foods. Eat less of Cold & Moist foods and the least amount of Hot & Moist foods.
- Include plenty of fruits and vegetables in the daily diet.
- Drink copious amounts of water and other fluids.
- Eat plenty of brown and white rice, millet and oats and similar grains.

Physical exercise

The patient should be encouraged to:

- Undertake regular light-to-moderate exercise, and increase general physical activity.
- Avoid physical over-exertion, especially in hot and humid weather.

Sleep

- Good quality sleep is essential for optimum health. For people with sanguinous hypertension, sleeping at least seven hours a night is recommended. A short nap during the day can be beneficial.

Emotions

- Mental stress is a major predisposing factor for the onset and persistence of hypertension. The person should identify and deal with the problems which underlie the stress.
- A mixture of Ylang-Ylang, grapefruit, bergamot and cinnamon aromatherapy oils massaged into the whole body is a beneficial Tibb-approved therapy.

Elimination

The patient should be encouraged to:

- Adopt and maintain a high-fibre diet.
- Drink fresh water regularly throughout the day.
- Wet cupping is advised every 2 to 3 months.

Additional advice:

- Breathing exercises are a powerful way of inducing relaxation in a hypertensive person.
- Advise the person to try to lose body mass, if excessive. That is, encourage the person to reduce the Body Mass Index (BMI) to below 25.
- Stress the importance of reading his or her blood pressure at least every two to three weeks.
- If the patient is pregnant, blood pressure should be monitored frequently by a healthcare worker.
- Advise the person to avoid or limit salt-rich products such as peanuts, pickles and sausage.
- The person should also restrict consumption of foods rich in animal fats.

Melancholic hypertension

This condition is associated with *Cold & Dry* qualities, so treatment involving the Lifestyle Factors should reduce excess coldness and/or dryness characteristic of melancholic hypertension.

Food and Drink

- Urge the person to change to a diet which contains foodstuffs with qualities that are ideally Hot & Moist foods followed by Hot & Dry. Eat less of Cold & Moist foods and the least amount of Cold & Dry foods.
- The person should be advised to eat plenty of fruit and vegetables, and reduce his or her salt intake markedly.
- Get the person to include garlic as a regular feature of the daily diet.
- Consume grains such as brown or white rice and oats.

Physical exercise

- The person should take regular moderate exercise. For example, taking a brisk walk in the morning and after supper should be encouraged.
- The person should avoid physical over-exertion.
- The person should take adequate rest, and during this time 'listen to the body'.

Sleep

- The person should aim to sleep for 6+ hours nightly, with a short nap during the day.

Emotions

- As mental stress is a major predisposing factor for the onset and persistence of melancholic hypertension, the person should deal with the problems which underlie it.
- Massage with lavender, chamomile, rosemary and clary sage aromatherapy oils is often beneficial.

Elimination

- Encourage the person to adopt and maintain a high fibre diet. This helps to promote daily bowel movements.

- Ensure that the person drinks 2-3 litres lukewarm water daily. This assists the body in eliminating toxins through the kidney, gut and skin.
- The person should consider a periodic 3 to 5 day fast. This is recommended as a way of cleansing the body of toxins.
- Wet cupping is advised at least twice a year.

General advice for both types of hypertension

Wet cupping is a time-tested option for the management of hypertension. It is particularly effective in sanguinous hypertension, where more blood is usually removed during the cupping procedure, thereby reducing the blood volume. In addition to the use of medication as well as cupping, changes in lifestyle can have a significant benefit.

- Having an accurate blood pressure check at least every two to four weeks is advised. If the person is pregnant, this should be done more frequently.
- To consider meditation, prayer or contemplation, as these are well established de-stressing relaxation behaviours. The benefit can be increased by undertaking breathing exercises, as does visualising the colours blue or violet for 5 minutes before bedtime.
- Tibb has devised a number of breathing and meditation exercises for different qualitative imbalances. These are available on the Tibb website: www.tibb.co.za/environmental_html

Tibb's supportive measures

Understandably, people living with hypertension may be anxious, depressed and despondent. They visit their doctor as people with no troubling symptoms which specifically suggest high blood pressure. Now they are labelled patients, and made aware that they are at risk of stroke, heart attack or other catastrophic event. They were probably informed that their hypertension cannot be cured, but only contained.

In addition, they are now faced with the prospect of continuous drug treatment for the rest of their lives, and the substantial expense of drug therapy and regular clinic visits. The unwelcome burden of drug side effects, the need for regular monitoring, and possible employment issues is daunting. All this damages their Quality of Life.

As a first step Tibb recommends that the patient confirms unambiguously that high blood pressure truly exists – either by employing the Ambulant Blood Pressure technique, or by consistent Home BP Monitoring.

Another factor is the myth that high blood pressure cannot be cured. Having been told this by their healthcare practitioners, most people feel that little can be done.

Tibb strongly affirms that abnormally high blood pressure is in most cases a symptom of a dysfunctional lifestyle. By encouraging a sensible, healthy way of living with a better diet, more exercise and help in reducing body weight, and other measures, high blood pressure can be lowered into the normal range.

There is also the issue of *preventing* high blood pressure developing. Even if someone's close family members are diagnosed with hypertension, it does not mean that that person will get it, or can do nothing to prevent it developing. Simple changes to everyday living, such as such as adopting a healthier diet, becoming more physically active, limiting salt intake and keeping weight under control, can help prevent high blood pressure. It does not mean giving up favourite foods and drinks, taking up demanding exercise plans, or changing lifestyle completely. *Lifestyle changes do not need to be unpleasant or difficult.*

Tibb strongly supports the empowerment of people living with hypertension, based on accurate and easily understood information. Empowerment replaces fear with hope. By taking the initiative in their disease management they can have a longer, economically active and valuable life.

Someone with hypertension has to be convinced that high blood pressure can be managed successfully by making reasonable changes to lifestyle which supports their power of inner healing. In doing so, they take responsibility for their condition and should expect to live a better Quality of Life.

Tibb aims to create a positive, encouraging and supportive environment for the management of high blood pressure, based on education and conviction of the benefits of blood pressure reduction.

Drug treatment of hypertension

There is a wide range of effective blood pressure lowering agents, with different mechanisms and duration of action. They are used either on their own or (more usually) in combination. They all reduce the person's blood pressure by roughly the same amount when used at the recommended dosage. There is no real benefit from a high dose, as side effects soon 'kick-in'. Not all drugs work for all people, and each drug has its own type of side effect or longer term adverse action.

The main classes of drugs commonly are:

Diuretics, or *water tablets*, help the body get rid of excess salt which has usually accumulated over time from the diet, or because the kidneys are not working correctly. They encourage the person to pass more urine. In doing so, they reduce the amount of fluid in the body, blood volume falls, and so does blood pressure.

Beta blockers. These improve the efficiency of the heart by reducing the workload imposed upon it by the demand for blood at high pressure. These agents slow down the nervous system, which regulates the blood pressure mechanisms. They lower the person's heart rate and output of blood.

Calcium channel blockers. Calcium ions are needed for the muscle cells of the heart and small arteries to contract. The ions enter these muscle cells through 'port holes' or channels in the cell membrane. The drugs block these channels. This leads to decreased resistance in the blood vessels, so a fall in blood pressure.

ACE inhibitors. *ACE (angiotensin-converting enzyme) blocks the action of angiotensin. This hormone is released from the kidneys causing the arteries to narrow, leading to increased peripheral resistance, and so a rise in blood pressure. ACE inhibitors reduce angiotensin secretion. This helps the arterioles relax, so blood pressure falls.*

Angiotensin antagonists. These vasodilator drugs, also termed 'sartans', lower blood pressure by blocking angiotensin's action on the blood vessels. This lets them relax and dilate, so reducing peripheral resistance, and a fall in blood pressure follows. They also have a mild diuretic action, which helps to lower blood pressure.

Adverse effects of anti-hypertensive drugs

Side effects

Patients often complain that a drug 'upsets' them, giving them a headache, stomach ache, swollen ankles, or some other unpleasant symptom. These are *side effects*. All drugs have side effects, to a greater or lesser extent.

- *Diuretics*, regarded as safe anti-hypertensive drugs, can upset the person's metabolic harmony. . This may lead to confusion and weakness, especially in the older person. Other side effects of diuretics are an irregular heart rhythm, and sometimes an attack of gout. Another problem with diuretics is that they can raise blood sugar levels. In many people this is not really a problem, but in diabetics it can interfere with their treatment.
- *ACE inhibitors* often cause a troublesome, long-lasting cough. Also, they are not recommended for pregnant women, as they may damage the foetus.
- The *calcium channel blockers* can cause headaches, swelling and cramping of the lower legs, constipation and skin flushing.
- *Beta blockers* can make breathing and blood circulation disorders even worse. They can also make the person feel fatigued, and complain of muscle ache. They should be avoided by diabetic persons and pregnant women. Sound sleep may be difficult to get.
- *Angiotensin antagonists* are prone to headaches, fainting and dizziness. Patients may also complain of pain in the back and legs.

Metabolic effects

These are the 'invisible' longer-term side effects of drugs by interfering with basic metabolism. The person may not feel anything is wrong, but subtle changes are taking place in his or her body biochemistry, and can cause serious problems later on.

- Changes in the body's *blood sugar levels*. For people who are diabetic this may interfere with their treatment with insulin or other drugs.
- Changes in a person's *blood cholesterol levels*, so interfering with any cholesterol-lowering treatment.
- They may interfere with the levels of certain substances – *electrolytes* – such as potassium, calcium and magnesium in the blood. The effect on the person may be fatigue or a disturbed heart rhythm.
- Increasing levels of certain chemicals such as *uric acid* in the blood. For instance, long-term treatment with diuretics is often gout.

The Tibb view:

- ***The response of many patients to side effects is to discontinue treatment.***
- ***Side effects and longer term reactions are a good incentive to adopt a more natural approach to treating high blood pressure.***
- ***Side effects can open the door to an integrative approach to treatment, as the dose of the drugs used can be lowered.***

Drug interactions

Treatment for hypertension often involves taking two or three drugs simultaneously. These drugs can interfere with each other once in the body, causing problems. In addition, the patient may have other disorders not related to hypertension, such as infections, diabetes, arthritis and epilepsy, especially if they are elderly. If other drugs are being taken for these diseases, then drug interactions are more likely to occur.

The Tibb view:

- *Tibb accepts that herbal remedies and conventional drugs may interact, and the patient should be aware of this.*
- *Tibb is not aware of any reliable information about the interaction of conventional blood pressure lowering drugs and Tibb herbal products.*

Alcohol consumption

Alcohol often interferes with the action of many drugs, including those used to reduce blood pressure. As the regular consumption of alcoholic beverages is common in many communities, drugs used to treat hypertension could be seriously affected. Unpleasant side effects or loss of effectiveness could follow.

Integrative treatment of hypertension

Integrative Medicine is a holistic form of healthcare that combines complementary and conventional medicines in the treatment of chronic and recurring disorders such as hypertension. Treatment deals initially with any troubling symptoms, largely by use of conventional drug therapy, and subsequently addresses the raised blood pressure.

Tibb is ideally situated as a partner for conventional medicine for a number of reasons:

- It focuses on supporting inner self-healing processes.
- It advocates realistic lifestyle-linked changes in behaviour.
- It involves the patient in both diagnosis and treatment.
- It can provide a number of therapeutic options of proven efficacy.

Furthermore, Tibb is consistent with conventional therapy, as they both share a common ancestry dating back to Hippocrates, Galen and Ibn Sina. Integrative Medicine focuses on support and stimulation of the person's Physis, rather than just alleviating symptoms of the disorder. It achieves this by combining conventional medicine, which takes care of the symptoms, with realistic lifestyle changes, individualised therapies and selected herbal therapy. Active involvement and motivation of the patient are key factors in successful therapy, and in achieving and maintaining optimum health.

Summary

High blood pressure is not a disease, but a symptom of an underlying disharmony in the body's blood distribution. When someone's blood pressure is consistently abnormally high, it is termed hypertension. Tibb sees hypertension is a multi-factorial disorder, with physical, emotional, mental and spiritual aspects. Most people with hypertension have a sanguinous dominant or sub-dominant temperament. It arises from an increase in the volume of blood in the body. Other people may have hypertension due to an imbalance in Cold & Dry qualities. These are generally dominant or subdominant melancholic types. Hypertension is dangerous because it can inflict serious damage on a number of organs in the person's body, leading to heart failure, stroke, kidney failure, blindness, and painful walking. For Tibb, hypertension arises because of long-term abuse of the Lifestyle Factors. In addition, the person's temperament plays a major part in the onset and maintenance of hypertension.

Hypertension is managed holistically in Tibb by involving dietotherapy, the Lifestyle Factors, herbal products, cupping and other physical therapies. Two areas to adopt for correcting high blood pressure are diet and exercise. The combination of good diet and physical activity works even better. In conventional medicine, the cause of most cases of hypertension is unknown, although in a small percentage it develops from diseases of the kidney and other glands, during pregnancy, or as a drug side effect. The conventional approach to hypertension involves selection

from a veritable menu of drugs: diuretics, alpha and beta blockers, ACE-inhibitors, calcium antagonists, sartans among them. They are used singly or in combination, and often in a step-wise therapy protocol. Poor compliance, side effects and variable efficacy characterise different agents used. Tibb remedies can be combined with conventional therapy in an Integrative Medical approach to high blood pressure. For many people this is the most effective, well-tolerated and cost-effective option.

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Further reading

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