

## High Blood Pressure – Sample Chapter

One day several relations of Rita, my wife, paid us a visit. In the course of the interaction one of our guests spotted the blood pressure measuring machine in the living room.

“Doc, can you please measure my blood pressure? I do not remember the last time I had it checked.”

“No problem!” I replied. Without delay, I went into action to measure it. It read 115 over 70.

“Normal; no cause for concern!” I told him.

“Would you mind checking mine as well!” his other half requested.

“Of course not!” Like her husband, her pressure was also okay.

Soon it turned out to be a kind of “children’s game”, for everyone present wanted to have his or her blood pressure checked!

Soon I would become not only a messenger of good news, but also of news not so pleasant—for, as it turned out, the blood pressure of one of our visitors was extremely high, requiring treatment as early as practicable!

Our visitor knew all along that his wife’s blood pressure was high, a fact that had required her to take medication. What he was not aware of, however, was the fact that he had also developed the condition. (That is not to say that his wife had passed it on to him. No, high blood pressure is not, as it were, an infectious disease that our spouses or our neighbours can pass on to us. As we shall soon find out, we may inherit it from our parents, but that is as far as it goes.)

As it turned out, our relation had been living with high blood pressure, a veritable “time bomb”, as it were, without being aware of it! That indeed is one of the disturbing aspects of high blood pressure.

If you and I visit a restaurant and eat food infested with the salmonella bacteria, our respective bodies would likely react in a matter of hours with nausea, vomiting and in some cases diarrhoea. Soon it would become clear to you and me that something is wrong with our body system. We would then take appropriate steps to reverse the situation. The situation, unfortunately, is different, when it comes to high blood pressure. One may indeed live with it for a considerable period of time without knowing it! Then, all of a sudden, one day, just like a time bomb waiting to explode, it does indeed burst out—sometimes in deep sleep. It could manifest itself as a stroke or a heart attack that could lead the individual never to awaken from sleep.

“He was fine, in real good spirits when he [or she] bade me goodnight!” the shattered spouse or relation might tell you. If that individual happened to reside in my native Ghana, his or her

relations would, with all likelihood, blame witchcraft, wizards, jujumen, etc., for having cut short the life of the successful businessman or woman. Indeed, the only way for a person to know whether he/she lives with the condition of high blood pressure is to have the pressure checked by a competent person—a health assistant, a nurse, a doctor, etc. Having said that by way of introduction, I shall give a brief overview of the condition.

Blood helps transport oxygen and nutrients to various parts of the body. On its journey back to the heart, it picks up the waste products of metabolism for further transport to the lungs, the liver, the kidney etc.

The heart is an amazing muscular pump, in the chest to pump blood around the body. In order for the blood to be pumped around the body, pressure must be generated by the heart.

Medical science uses the term hypertension when blood is forced through the arteries with an increased force.

Blood pressure is expressed as two numbers, for example "120 over 80". The top number is known as the systolic pressure. This stands for the pressure generated by the heart on beating.

The bottom number, known as the diastolic pressure, stands for the pressure in the circulatory system when the heart is resting between beats.

A person's blood pressure is generally considered normal if it stays slightly above or below 120/80. A person whose systolic blood pressure is consistently 140 or higher or whose diastolic pressure is 90 or higher is generally considered to have high blood pressure.

## **CAUSES**

In about 90% of cases, medical science has not found any reason to explain why someone's blood pressure is high. This condition is known as essential or primary hypertension.

In the remaining 10 per cent of cases, there is an underlying cause. This is called secondary hypertension.

Some of the main causes for secondary hypertension are:

- chronic kidney diseases
- diseases in the arteries supplying the kidneys
- chronic alcohol abuse
- hormonal disturbances
- endocrine tumours

## **SYMPTOMS**

As the example I cited at the beginning demonstrates, initially high blood pressure may not cause symptoms and go unnoticed until it leads to complications such as a stroke or heart attack. In severe cases of the condition, some of the following symptoms could become apparent:

- headache
- sleepiness
- confusion
- coma

## **RISK FACTORS**

Medical science has identified the following risks factors for the development of high blood pressure:

- Family Background: The condition tends to occur in families.

For example, if your father or mother has the condition, you are also at the risk of developing it as well.

- Obesity/Overweight: It has been established that people who are obese or overweight have a high risk of developing high blood pressure.
- Smoking: Apart from the more common risk factors associated with it such as lung cancer and other respiratory diseases, smoking has also been identified as a risk factor for the development of high blood pressure.
- Diabetes: Diabetes itself does not lead to high blood pressure. However, it has been established that the two conditions tend to occur together in the same individual.
- Kidney Disease: Certain types of kidney diseases lead the afflicted person to develop a high blood pressure.

## **TREATMENT**

I have outlined above the possible risk factors for the development of high blood pressure. Avoiding the risk factors could help prevent disease. If, despite such measures, the blood pressure remains high, treatment with medication would become necessary. Such medication would need to be taken regularly and in some cases for the rest of the individual's life. Talking of taking medication on a regular basis! As a GP I have to keep on reminding my patients to do exactly that. There are indeed some who, after the medication has led to a normalisation of the blood pressure, decide to stop taking it. This could eventually lead to a re-bounce effect in which the pressure shoots up again.

## **MEDICATION**

There are several medications in use. They are usually placed in groups. Examples of the groups of medication in use are as follows:

- ACE Inhibitors
- Angiotensin-II receptor antagonists
- Beta-Blockers
- Alpha-Blockers
- Calcium-Channel Blockers Diuretics

I shall not consider the groups in detail. You may consult your family doctor for further details.

## **LOW BLOOD PRESSURE**

Before I leave the area relating to our blood pressure, I shall impart some information on low blood pressure. In considering the possible complications of high blood pressure vis-a-vis low blood pressure, I usually tell patients with low blood pressure to be, as it were, happy that they have a low rather than a high blood pressure.

In the case of low blood pressure, the heart is pumping blood at a pressure below the average expected of a normal human being.

Such individuals may feel dizzy and have the feeling that they might “pass out” especially on standing up. The reason behind this feeling may not be hard to figure out. The brain is very sensitive to oxygen and nutrients supplied by blood. When one stands up, the heart is required, at least momentarily, to pump blood with extra force in response to the altered position of the body. For the person with a low blood pressure the pressure generated by the heart may not be adequate.

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