

Hypertension



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There are many preventable diseases in our country.

Hypertension remains the top disease affecting many people across the United States. The reason our healthcare system is so focused on this condition is because of the conditions which are very treatable as well as preventable. Hypertension remains the predominant illness in our medical system. The reason why our doctors provide so much focus on hypertension is because the main modes of therapy are very simple: diet and exercise. However, the US population does not focus or abide with diet and exercise and physicians are forced to rely on medical management. Since the majority of the US population is suffering from hypertension, it is important that all individuals have an understanding on this matter.

By truly understanding hypertension, we people can have a better knowledge of how to prevent the condition as well as its many serious complications. Hypertension occurs when the blood pressure is elevated this is a severe medical condition. This condition is too often nearly afflicted over a billion people internationally and is a major factor to mortality and morbidity. This disease is often termed as the "silent killer". The disease is usually unnoticed until the damaging effects such as stroke, renal function and blindness have come upon the patients. Hypertension is also known as high blood pressure.

Hypertension is defined on the basis of levels above generally accepted normal. The normal pressure of an adult would be 120/80. Blood pressure is calculated in millimeters of mercury. The number on top is the pressure

that is made when your heart beats which is referred to as the systolic number.

The systolic number may be above normal when it is above the 140 level. The number on the bottom is the pressure inside blood vessels when the heart is at ease which is also known as the diastolic number. The diastolic number is above normal when it reaches over 90. When your systolic reading is between 125 -138 and your diastolic reading is 80-89 you are said to be having pre-hypertension.

Those admitted with pre-hypertension have a much higher chance of getting high blood pressure. Over 15% of the general population in the USA are regarded as being hypertensive. Over 20 million individuals in Africa and 600 million individuals around the world have been reported to be hypersensitive. In North America over 90 million people above the age of 21 are suffering from hypertension. One out of four adults are suffering from hypertension and over 75% is fully aware that they are hypertensive. According to statistical data collected in 2008 over 65% of patients with hypertension are receiving treatments. A majority of the population do not have their hypertension under control. The major cause of hypertension is still not known to us but it can be easily identified and controlled. A recently conducted 10 year study shows that the rate of death increased over 25% and the reported number of deaths to 55%.

Non Hispanic whites are less likely to suffer from high blood pressure than non Hispanic blacks. The highest rate of hypertension within the African Americans would be those suffering from diabetes, less educated, overweight

and physically inactive. In the past 5 years the death rate per every 100, 000 people were 15. 8 white males, 52. 1 black males, 15. 1 white females and 40. 3 black females, from this information it is evident that more and more individuals are dying from hypertension regardless of race and gender.

Nearly 550, 000 nursing home residents are suffering from hypertension and a quarter of that number are also health care patients suffering. Already over 20 million individuals in Africa and 600 million individuals around the world have been reported to be hypertensive. Hypertension is generally categorized into two forms the primary or essential hypertension and the secondary hypertension.

The primary hypertension accounts for nearly 90% of all hypertension cases and unfortunately the specific underlying cause is still unknown. It is learnt that nearly 70% of them have a positive family history. The sedentary lifestyle, obesity and body mass index is assumed to be a factor of the hypertension. Insulin resistance or metabolic syndrome is also believed to be a cause of hypertension. Secondary hypertension is a type of hypertension that is the consequence of an abnormality or a specific disease. There are several causes of this hypertension such as coarctation of aorta, renal causes, endocrine causes, alcohol and drugs, narrowing nature of the aorta between the lower and upper body branches.

It is usually situated in a position just after the arch of the aorta valve. The place in which the coarctation happens is in most cases where the also associated with coarctation of the aorta we are able to identify the coarctation of the aorta by radio-femoral delay, upper limb hypertension

and by hearing a systolic murmur over the spine. Renal causes are affected by plaque deposits that collect in the artery and micro fiber dysplasia. The arteries supplying blood to the kidneys are narrow or have become blocked. Drinking is a major cause for increased high blood pressure. But the relationship between the mortality deaths and hypertension with regard to drinking and substance abuse is still unclear and several studies have been carried out to determine its relationship.

The majority of individuals suffering from hypertension are not even aware that they suffer from such a disease. This is due to the general lack of symptoms and is usually only noticed in the severe stages. Through regular medical care and checking of the vital signs one is able to monitor and understand a person's hypertension and thus able to give proper treatment. It is also important that we identify any underlying cause with regard to hypertension as these problems may increase with time. The recognition of certain risk factors are also related to the development of complications.

Finally we are to detect any complications that are already present within the patient. A majority of the hypertension are detected on the routine examination. The major cause of acute hypertension is transient headache and polyuria. Long standing hypertension would lead to left ventricular hypertrophy and very short early diastolic murmurs. Panic attacks, paroxysmal headache and papatations suggest chronic pyelonephritis. Recurrent back pains, undiagnosed fever and recurrent urinary infection are also signs of increased hypertension.

The initial diagnosis of the patient would include the physical examination and complete medical history to determine the patient is suffering from hypertension. We are able to diagnose a patient with regard to hypertension in two methods which are the basic and secondary methods. The basic study involves those methods which we are able to attain from tests. The first is a urine analysis of the patient which would look into the levels of protein, blood and glucose.

Also the blood urea level and creatinine is to be closely monitored to assess any renal failure which can cause hypertension. The fasting and postprandial blood glucose levels are to be checked for hyperglycemia. Electrocardiogram and chest radiographs are also carried out on the patients to know the cardiac size, any evidence of cardiac failure and aortic dilation. The secondary studies monitor the levels of the tests which are being carried out and include the pheochromocytoma plasma which should consist of plasma catecholamine levels and 24 hour urinary VMA and their metabolites. Polycystic renal disease diagnosis is also carried out through radiograph of the skull also help to diagnose the problems related to that of hypertension. The treatment of hypertension is carried out by three methods which are general, antihypertensive drugs and treatment of the underlying cause. The general measures of hypertension would include controlling obesity this is possible by watching the calorie intake and food consumption, maintaining low levels of sodium in one body usually consisting of