

HIGH BLOOD PRESSURE CHRONIC KIDNEY DISEASE



HIGH BLOOD PRESSURE

High blood pressure is one of the main causes of chronic kidney disease. Furthermore, poorly controlled high blood pressure can lead to the progression of kidney disease to its advanced stage and other complications. It is important to have a good control of your blood pressure (BP).

WHAT IS BP?

The heart pumps blood through the arteries in the body. This is a closed circuit with a continuous flow of blood, so it results in pressure of the blood on the walls of the arteries.



Blood Pressure Monitor

HOW IS BP INTERPRETED?

BP reading consists of 2 numbers: a top number (e.g. 118) and a bottom number (e.g. 78). It is read as '118 over 78' and written as '118/78':

- The top number (systolic) represents the pressure of blood flow when the heart is pumping
- The bottom number (diastolic) represents the pressure of blood flow when the heart is relaxed between heart beats and refilling with blood.

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HOW IS BP MEASURED?

Classically, BP has been measured by using manual sphygmomanometers. Nowadays, it is often measured by using an electronic digital device. BP is measured in millimetre of mercury (mmHg).

WHAT IS THE NORMAL BP?

Healthy young adults should have a BP around 120/80 mmHg or less. But this changes as you get older.

IS HIGH BP COMMON?

Yes. According to the World Health Statistics 2012 Report, 1 in 3 adults worldwide has high BP. The medical term for high BP is hypertension.

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WHAT CAUSES HIGH BP?

In most cases (95%) the cause is unknown - this is called essential hypertension and it is a chronic condition (lasts a lifetime). Various factors may contribute to this type of high BP:

- Family history of high BP (e.g. a close relative has high BP)
- Getting older
- People from African, Caribbean and Indian subcontinent origins
- Diabetes (See “Diabetes Mellitus”)
- People who are overweight, do not get enough physical exercise, eat a lot of salty foods, do not eat enough fruit and vegetables, and drink a lot of alcohol.

In some cases (5%), BP is high because of a specific cause such as kidney or hormonal diseases. This condition is called secondary hypertension and may be controlled by treating the cause.

DOES STRESS CAUSE HIGH BP?

A stressful situation can cause BP to be higher, but this is only temporary. When stress is relieved, BP usually returns to its normal level.

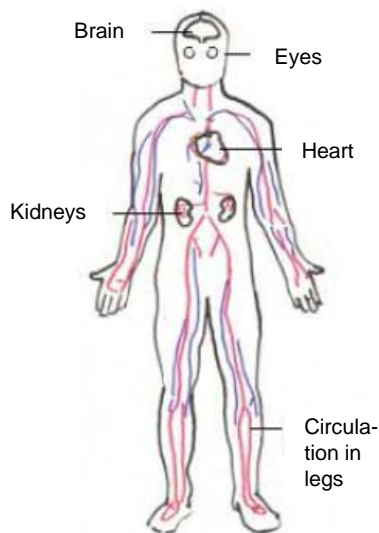
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WHY IS HIGH BP HARMFUL?

High BP can damage the blood vessels in the heart, brain, kidneys, eyes and legs, causing serious complications. Therefore, it is very important to keep your BP under good control.

HOW DOES HIGH BP AFFECT THE KIDNEYS?

If the BP is persistently high (140/90 or higher), it damages the blood vessels in the kidneys. This will reduce the blood flow to the kidneys and damage their job as filter causing less kidney function. Prolonged uncontrolled high BP can result in the progression of kidney disease to its end stage. (See "About Your kidneys")



Harmful effects of high BP

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WHAT WILL YOU FEEL OR NOTICE (SYMPTOMS) IF YOUR BP IS HIGH?

High BP does not usually cause symptoms. In many cases people do not know their BP is high until they go to the doctor for another reason. However, extremely high BP can cause headaches, blurred vision, nose-bleeds or nausea and vomiting.

WHAT CAN YOU DO TO HAVE GOOD CONTROL OF YOUR BP?

To help control your BP at a good level, you need to:

- 1) Check your BP regularly at home (See “Home Blood Pressure Monitoring”)
- 2) Take your medicines as prescribed by your doctor
- 3) Follow a healthy lifestyle:
 - Lose extra weight
 - Do physical exercise several times a week
 - Do not add salt to your food and avoid eating salty foods
 - Limit alcohol to 2 drinks a day for men and 1 drink a day for women and lighter-weight men. (See “Healthy Lifestyle”)

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WILL YOU HAVE TO TAKE BP MEDICATION FOR A LONG TIME?

You will most likely have to take medicine for life because high BP is a chronic condition. You should not stop taking the medicines when your BP is normalised, unless your doctor tells you to do so.

A sudden interruption in your treatment may cause a new rise of BP which may be higher than before.

SOME CONSIDERATIONS ABOUT TAKING MEDICINES:

- You should take your medicines regularly and continuously, according to your doctor's prescription.
- Make sure you have enough medication with you and renew any medicine before it is finished. Remember to take a supply with you when you go on holiday or out to lunch/dinner.
- Some medicines may cause slight discomfort, especially when you take it for the first time. Often this problem disappears after a few days.

If the problem persists, you should notify your doctor or nurse. Do not stop or change to your old medication without consulting your doctor/nurse.

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CAN HERBAL PLANTS LOWER BP?

Some herbal plants can lower BP but they are not efficient. Furthermore, some herbal remedies can interact with medicines, causing harmful side effects. It is important to talk to your doctor or nurse before taking any herbal remedy besides your BP medicines.

WHICH IS THE TARGET LEVEL OF BP IF YOU HAVE CHRONIC KIDNEY DISEASE?

The aim is to keep your BP preferably $\leq 130/80$ mmHg.

IS IT SAFE TO TAKE BP MEDICINES IF YOU GET PREGNANT?

There are some BP medicines which can be harmful for pregnancy and during breastfeeding period. Therefore, it is very important that you tell your doctor or nurse in time if you plan to be pregnant or you are breastfeeding, so that the right medicines will be prescribed for you.

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WHERE CAN YOU GET MORE INFORMATION ABOUT HIGH BP?

You can ask your nurse for more information from the local hypertension foundations and/or organisations.

Some reliable websites:

- <http://www.patient.co.uk/health/high-blood-pressure-hypertension>
- <http://www.nhs.uk/Conditions/Blood-pressure-%28high%29/Pages/Causes.aspx>
- <http://www.nlm.nih.gov/medlineplus/highbloodpressure.html>
- <http://www.patient.co.uk/doctor/Diseases-and-Different-Ethnic-Groups.htm>

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KEY POINTS TO REMEMBER

- 95% of high BP is a chronic condition which cannot be cured.
- A good control of high BP can prevent serious complications, bearing in mind that high BP is usually without symptoms.
- A healthy lifestyle and medicines can help to control high BP and delay the progression of chronic kidney disease.
- Do not stop taking the medicines when your BP is normalised, unless your doctor tells you to do so.
- Herbal remedies may interfere with the medicines used to lower BP.
- Tell your doctor or nurse if you plan to be pregnant because BP medicines will have to be changed.

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