## Hypertension

#### What is hypertension?

Hypertension means high blood pressure and is present when your blood pressure is greater than normal levels for the population. There are two types of blood pressure (BP) that we measure: systolic and diastolic. The systolic BP is the pressure at the moment the heart pumps the blood into circulation and the diastolic BP is the pressure when the heart relaxes and takes in blood. Both levels of pressure are very important.

BP is measured in millimetres of mercury (mm Hg). We have hypertension if our pressure is greater than either the systolic pressure (140) or the diastolic pressure (90) which are the standard uppermost limits of normal. Very high BP is one more than 180 systolic or 110 diastolic.

# What are the normal and recommended levels of BP?

The normal BP for all adults over 18 years is one that is less than 130 systolic and 85 diastolic. A pressure between 130/85 and 140/90 is regarded as in the higher level of normal. The normal BP for a person over 65 years is one that is less than 140 systolic and 90 diastolic so an extra 5 mm pressure is acceptable for an older person. It is vitally important for people with diabetes and kidney disease to keep the BP below 130 and 80.

#### What causes hypertension?

In most cases (95%) there is no identifiable cause—it just happens that way. The pressure in our arteries is high because the heart pumps too hard and the arteries are too narrow. This is like the pressure in a hose—the further we turn up the tap and the narrower the hose, the greater the pressure. Sometimes hypertension is caused by a kidney problem or some other rare disorder. Drinking excessive amounts of alcohol is an important cause.

## Who gets hypertension?

Anyone can get it. It is very common and affects about 15 to 20% of the adult population in Western countries. BP tends to rise as we get older. However, most people are not aware they have it. It rarely gives warning symptoms.

## What are the symptoms?

Usually there are none. People with very high BP can feel quite well. It is rare to feel headache, palpitations or sick until complications set in.

## What are the risks of having it?

Hypertension is often referred to as the 'silent killer'. You are more likely to have strokes and heart attacks than people with normal BP. The risk increases as the BP rises. With time the pressure can cause the heart and kidneys to wear out, that is heart failure and kidney failure. By

keeping the BP within normal limits, we reduce the risks of strokes and heart trouble, including coronary attacks and kidney failure.

#### What is the treatment?

Medication (called *antihypertensive* medication) can reduce your high BP, but it might be possible to lower your BP to normal by leading a sensible, healthy lifestyle. This self-help may avoid a lifelong commitment to drugs.

#### Self-help

- Diet: Follow a nutritious, low-fat diet.
- *Salt*: Put away the salt shaker; use only a little salt with your food.
- Obesity: Aim to keep to your ideal weight.
- *Alcohol*: Aim for either none or only small amounts (maximum of two standard drinks a day).
- *Stress*: Avoid stress and overwork. Consider relaxation or meditation classes.
- *Exercise*: Exercise regularly, aim for 30 minutes of daily activity such as walking.
- *Smoking*: This does not seem to cause high BP, but is a risk factor for heart disease—so please stop.

#### Medication

If natural measures do not bring down your BP, tablets will be necessary. The tablets act by softening the strong pumping action of the heart or relaxing the tight arteries or reducing the body chemicals that control your BP. The tablets must be taken regularly as directed and never stopped unless advised by your doctor.

## How often should your BP be checked?

If your BP is found to be normal it should be measured every 1 to 2 years by your doctor. If you are over 40 years, it is wise to have it checked every year because it tends to creep up with age. Women on the pill need to be checked regularly.

