

## ESSENTIAL HYPERTENSION

### General Information

Hypertension means a rise in the blood pressure above normal levels. This rise occurs when there is abnormal resistance to the flow of blood through the blood vessels. Many persons have temporary, slight increases of blood pressure of no importance, but they should be followed up occasionally, for they may or may not become true hypertensives eventually. The term essential implies that we do not know the underlying cause. The condition is not contagious, and is not a sign of cancer. There are several types of hypertension for which the cause is known. The treatment for these is to remove the cause when possible.

Much research continues on essential hypertension so we may better understand and treat this disorder that affects at least 1/3 percent of adults in the United States. Hypertension affects some populations more severely. It occurs more often in African Americans. They tend to have hypertension earlier in life; usually it is more severe and they suffer more from a higher death rate from stroke, heart disease and kidney failure.

Hypertension may exist for many years without symptoms. When symptoms do occur, there may be fatigue, dizziness, nervousness, sleeplessness, weakness, headaches, and eventually heart disease, kidney failure or strokes.

The reading of the blood pressure is divided into two parts, systolic and diastolic. Systolic refers to the blood pressure which exists at the instant the heart muscle contracts. Diastolic refers to the blood pressure during the period the heart muscle is relaxed and its chambers are filling with blood to be pumped at its next contraction. There are various ways of recording the blood pressure. The most common is to give two figures; for example, in 120/80, the first figure is the systolic pressure and the second the diastolic pressure in millimeters of mercury, as used in the measure device.

The aim of treatment is to reduce the blood pressure to normal or nearly normal levels with a minimum of side effects. Keeping the blood pressure normal will prevent many or all of the harmful effects on the body that prolonged hypertension will produce.

### Important Points in Treatment

- **Maintain a Healthy Weight**
- **Follow a healthy diet.** The Dietary Approaches to Stop Hypertension (DASH) diet is recommended as a first-line approach to manage hypertension. The DASH diet is high in fruits, vegetables and other nutritious foods that are rich in potassium, calcium and magnesium. People who follow the DASH diet are encouraged to decrease their saturated fats and replace them with foods high in monounsaturated fats and omega-3 fatty acids, such as those found in fish. Salt restriction is also a major part of the DASH diet. Recommendations are that people with hypertension limit their salt intake to less than 2,400 mg (about one teaspoon) a day. Studies have shown that people who follow the DASH diet can decrease their systolic pressure by 11 points and their diastolic pressure by about 6 points.
- **Stay Active.** All you need is 30 minutes of moderate level physical activity on most days of the week. You can even divide the 30 minutes into shorter periods of at least 10 minutes each.
- **Limit Alcohol Intake.** Drinking too much alcohol can raise blood pressure. It can also harm the liver, brain or heart. If you drink alcoholic beverages have only a moderate amount – one drink a day for women; two drinks a day for men.
- **Don't Smoke.** Even just smoking one cigarette can cause transient blood pressure increases of 10 points or more. Smoking will also increase the risk for heart disease and stroke.
- **Manage Stress**
  - Confront and define any areas of conflict in your family life, occupations, pursuits; and civic,

spiritual, or leisure time involvements. If you cannot resolve conflicts alone, ask for help from family, friends, or competent counselors.

- Be moderate in all your activities. Strive for a balanced life of work, recreation, reflection, and rest.
- Try to be of good humor.
- Seek and keep a positive outlook on life. A good attitude toward yourself and others is your most powerful ally.
- **Medications**  
Your medicines must be fitted to your own particular needs. Do not take any medicine (not even medicine you buy without prescription) without telling your clinician. If drugs are prescribed, carefully follow the instructions on the label. There are many medications available which effectively lower abnormal blood pressure. One type of medication at a time will be prescribed for you. Maybe one medicine will be enough, but you may need to increase the dosage before adequate control is attained.

#### **Notify Your Clinician if any of the Following Happens**

- Severe headache
- Severe dizziness
- Weakness in an arm or leg
- Chest pain
- Persistent cough
- Increasing shortness of breath
- Noticeable increase in heart rate

#### **Please Read**

If you develop any new, prolonged, or more severe symptoms of your illness, call the nurse at 863-4463, return or consult your personal clinician. If University Health Services is closed, go to the nearest hospital emergency department or call 911 for an ambulance.

#### **Test Results and Advice Nurse**

Please call the nurse for test results and advice: 863-4463

#### **Appointments**

Appointments can be made in person or by phone. If you are unable to keep your appointment, please call and cancel. Otherwise you will be charged for the visit.

To schedule or cancel appointments, call: 863-0774

**For more information about health care issues, visit the UHS Web site at [www.sa.psu.edu/uhs](http://www.sa.psu.edu/uhs)**

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