

# **High Blood Pressure and Kidney Disease**

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# **What We Will Discuss Today**

- Why high blood pressure and kidney disease are important**
- How high blood pressure and kidney disease can be treated**
- How the Tufts-New England Medical Center Kidney and Blood Pressure Center can help you and your doctor control your blood pressure and protect your kidneys**

# High Blood Pressure

- **What is blood pressure?**
- **What is high blood pressure?**
- **Why is high blood pressure important?**

# **What is Blood Pressure?**

- **The heart pumps blood to our muscles and to other organs like the brain, kidneys, liver, and stomach.**
- **The blood returns from the organs to the heart.**
- **Blood pressure is what makes the blood flow from the heart to the organs and back to the heart.**

# **How is Blood Pressure Measured?**

**The blood pressure is measured at two times**

- when the heart pumps: that gives the high number, or “systolic” blood pressure**
- when the heart relaxes: that gives the low number, or “diastolic” blood pressure**

# What is a Good Blood Pressure?

- **For most people: treat to get the blood pressure below 140/90**
  - the top number should be less than 140, **AND** the bottom number should be less than 90
- **For people who have kidney disease: treat to get it below 130/80**
  - the top number should be less than 130, **AND** the bottom number should be less than 80

# **The Higher the Blood Pressure, the Sooner People Die**

- **From stroke**
- **From heart disease**
- **From kidney disease**
- **This is true no matter where you live, where you come from, or whether you consider yourself White, Black or Asian**
- **The risk doubles with every 20 point increase in blood pressure**

# **Treating High Blood Pressure Has Made a Difference**

- **People live longer and live healthier after treatment of high blood pressure**

# **High Blood Pressure is a Silent Killer**

- **Only very high blood pressure makes you feel sick immediately**
- **Most of the damage is in the future**
- **You may feel fine with high blood pressure for 30 years, and then have**
  - **a stroke that paralyzes you,**
  - **or a heart attack that kills you,**
  - **or kidney failure requiring dialysis**

# **Many People Have High Blood Pressure**

- **50 million people in the United States**
  - almost 1 of every 5 people
- **If you live to age 55 years and have a normal blood pressure, you have a 9 out of 10 (90%) chance of developing high blood pressure during the rest of your life.**

# **High Blood Pressure Damages the Body in Everybody, but Even More in People**

- **Who smoke tobacco**
- **Who are overweight**
- **Who have diabetes**
- **Who have high blood cholesterol**
- **Who have kidney disease**

# **Kidney Disease**

- **What are the kidneys?**
- **What causes kidney disease?**
- **Why is kidney disease important?**

# **What Do the Kidneys Do?**

- The kidneys clean the blood.**
- The kidneys get rid of the fluid we drink.**
- The kidneys control the blood pressure.**
- The kidneys help to make blood.**
- The kidneys help to keep the bones strong.**

# **How Do You Know if You Have Kidney Disease?**

- **Like high blood pressure, kidney disease is usually silent until it has done its damage. Most people with kidney disease don't know they have it.**
- **Sometimes, kidney disease may cause swollen ankles or darkening of the urine.**

# **How Do Doctors Know if You Have Kidney Disease?**

- By blood tests to measure how well the kidneys clean the blood.**
- By urine tests to find blood and protein in the urine.**
- By looking at a urine sample under a microscope.**

# **What Causes Kidney Disease?**

- **High blood pressure and diabetes are the most common causes**
- **Other common causes**
  - **abnormal inflammation in the kidneys**
  - **inherited diseases**
  - **kidney stones**
  - **medicines and herbs**

# **Kidney Disease is Common**

- **More than 1 in 10 people in the United States has kidney disease**
- **More than 400,000 people have kidney failure requiring dialysis (blood cleaning) or a kidney transplant**
- **For Asians in the United States, the risk of kidney failure is 50% higher than among Caucasians.**

# **Why is Kidney Disease Important? (1)**

- Kidney failure used to be fatal for everyone**
- Dialysis and transplantation have changed this, but they are difficult, complicated treatments**
- It is better to slow the kidney disease down so that you can live out your life without kidney failure**

# **Why is Kidney Disease Important? (2)**

- **People who have kidney disease are more likely to die of heart disease**

# **How Can High Blood Pressure and Kidney Disease be Treated?**

- **Follow a special diet**
  - high blood pressure: avoid salt, eat fresh fruits and vegetables
  - kidney disease: a low protein diet can slow down the worsening of kidney disease, but this diet requires special supervision
- **Stop smoking**
- **Control blood sugar if you have diabetes**
- **Take blood pressure medicines faithfully**

# **Medicines for High Blood Pressure and Kidney Disease**

- Lowering the blood pressure is the only treatment for high blood pressure.**
- Lowering the blood pressure is the most important treatment for kidney disease.**
- Some blood pressure medicines are especially good for the kidneys.**

# **The Kidney and Blood Pressure Center**

- Our faculty are international experts in high blood pressure and kidney disease.**
- It is important to us to take excellent care of our neighbors in the Chinatown community.**
- We can help you determine whether you have high blood pressure or kidney disease.**
- We can help you and your doctor manage high blood pressure and kidney disease if you have them.**
- We hope to keep you from ever needing dialysis or a kidney transplant, but if you need them, we are leaders in those treatments.**

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