**HYPERTENSION IN EUROPE**

**Q: What is hypertension, and how serious is it?**

Hypertension, also known as high blood pressure, is a growing and significant health concern affecting more than 150 million citizens in Europe. It is characterized by consistently elevated blood pressure levels, which can lead to serious health complications if left untreated.

Hypertension is defined by medical professionals based on specific blood pressure measurement, combining both the systolic pressure (the top number) and diastolic pressure (the lower number) on the blood pressure monitor reading. In Europe, hypertension is defined as blood pressure values higher than 140/90 mmHg. But for those at higher risk for cardiovascular or renal disease, even lower blood pressure values may necessitate treatment.

**Q: How does hypertension impact cardiometabolic health?**

Hypertension is often referred to as the “silent killer,” since it often does not present noticeable symptoms. If left undetected and uncontrolled, however, it increases a person’s risk of severe health problems like heart disease, heart attack, kidney disease and stroke. Over time, hypertension can also damage major organs, like the eyes.
Q: What are the causes of hypertension?

A variety of factors can elevate a person’s risk for hypertension. These include:

**Genetics and Family History**
Having close relatives with high blood pressure raises a person’s risk of developing hypertension due to shared genetic and environmental factors.

**Age**
As people get older, their blood vessels lose elasticity and their risk of hypertension increases.²

**Chronic Stress**
Prolonged stress can release hormones that elevate blood pressure. People experiencing stress may engage in unhealthy coping mechanisms, like overeating, smoking or consuming alcohol excessively.³

**Lifestyle**

**Diet**
Consuming excessive amounts of sodium, saturated fats, cholesterol and processed foods can raise blood pressure.

**Physical Inactivity**
Lack of regular physical activity can lead to weight gain and weaker cardiovascular health.

**Obesity**
Being overweight or obese requires more blood supply and puts a strain on blood vessels.

**Tobacco and Alcohol Use**
Habitual smoking and alcohol consumption can raise blood pressure.
**Q: How can hypertension be effectively managed?**

Effective management is critical to reducing hypertension’s impact on a patient’s cardiovascular system and their risk for related complications. Proper management may entail a combination of approaches, such as regular monitoring and lifestyle modifications, as well as medications and procedures.

**Monitoring and Modification**

Regular blood pressure checks at home or through visits to a health care provider are crucial for tracking progress and ensuring that blood pressure levels remain within the target range. Monitoring blood pressure also helps patients and physicians identify any fluctuations or potential complications that may require adjustments to the management plan.

In conjunction with monitoring, patients can make lifestyle modifications to improve hypertension management. Engaging in regular exercise, limiting alcohol and tobacco use and making diet changes, such as limiting sodium and saturated fats, are modifications patients can make to help control blood pressure.

**Medications**

If lifestyle modifications alone are not sufficient, health care professionals may prescribe medications to help lower blood pressure.

There are several classes of antihypertensive medicines, including diuretics, beta-blockers, angiotensin-converting enzyme inhibitors, angiotensin receptor blockers and calcium channel blockers. The choice of medication depends on the individual patient’s specific health profile and any existing medical conditions.

**Medical Procedures**

Recent updates to treatment guidelines by the European Society of Hypertension state that renal denervation is now a recommended treatment option for patients needing to reduce their blood pressure. The procedure presents another treatment option, particularly helpful for patients who struggle to reduce their blood pressure through lifestyle changes or taking regular doses of a prescribed medicine.
Q: How does the renal denervation procedure work?

Renal denervation is a medical procedure that treats high blood pressure by interrupting over active communication between the kidneys and the brain. Renal denervation uses a device to deliver radiofrequency energy that deactivates some of the nerves around the arteries supplying blood to the kidneys. This disruption has been shown to help reduce blood pressure in the absence and presence of background anti-hypertension medication.4

Q: What are the benefits of improving hypertension management?

Improving hypertension management offers numerous benefits for both individual health and public health more generally. With effective management, patients will be less likely to suffer heart attacks, stroke or chronic kidney disease and can enjoy a longer, healthier life. At the wider society level, prioritizing hypertension management can reduce health care costs and lessen the burden on health care systems.

REFERENCES