**High Blood Pressure (Hypertension) Overview:**

• Hypertension is a common condition. It means that the long-term force of your blood against the artery walls is consistently too high.

• Hypertension has no initial symptoms, but it can lead to serious health problems, such as stroke, heart failure, and kidney failure.

• Hypertension is caused by an increased workload on the heart and blood vessels.

• Hypertension is diagnosed by closely monitoring blood pressure and recording several blood pressure readings.

• It can be managed through leading a healthy lifestyle and taking

Definition: Hypertension is a medical condition that occurs when the force of blood flow through the blood vessels is persistently elevated. This makes the heart work harder and increase the pressure of the blood flowing through blood vessels. High blood pressure is a major risk factor for heart disease, stroke, and other serious health problems. Blood pressure is determined by both the amount of blood your heart pumps and your arteries’ resistance to blood flow. Hypertension is generally a disease that develops over years, and despite the above, high blood pressure can be detected early and managed effectively

This pressure is the result of two forces:

1. The first force is called systolic pressure, and it occurs as blood pumps out of the heart and is carried to the rest of the body.

2. The second force is called diastolic pressure, and it is created as the heart rests between heart beats

Blood Pressure Category

Systolic pressure

(upper number)

Diastolic pressure

(lower number)

Optimal blood pressure Less than 120 Less than 80

Normal 120 - 129 80 - 84

Prehypertension 130-139 85 - 89

High blood pressure (Stage

1 hypertension)

140 - 159 90 - 99

High blood pressure (Stage

2 hypertension)

160 - 179 100 - 109

High blood pressure (Stage

3 hypertension)

Higher than 180 Higher th

Cause: The primary reason behind high blood pressure is the increased workload on the heart and blood vessels; making them work harder and less efficiently.

There are two types of high blood pressure that develop due to different causes:

• Primary (essential) hypertension (it has no identifiable cause): This type of high blood pressure is more common and it tends to develop gradually over many years. •

Secondary hypertension (it is caused by other conditions, such as):

1. Kidney problems or hormonal problems.

2. Thyroid problems.

3. Obstructive sleep apnea

4. Congenital blood vessel abnormalities

5. Certain medications.

6. Taking drugs or alcohol.

Risk factors:

• Genetics.

• Advanced age.

• Gender.

• Obesity.

• Smoking.

• Alcohol consumption.

• Psychological stress.

• Too much salt in your diet.

• Chronic diseases: Such as diabetes a

**Symptoms**: Most people with high blood pressure show no obvious signs or symptoms to indicate that something is wrong, even if their blood pressure readings are dangerously high, but some people may exhibit certain symptoms such as: • Headache. • Shortness of breath. • Nosebleeds. However, these signs and symptoms aren't indicative of a specific condition, and they usually don't occur until high blood pressure has reached a severe or a life-threatening stage.

Complications: • Aneurysm. • Stroke. • Heart failure. • Heart attack. • Kidney failure. • Vision Loss (blindness). • Sexual dysfunction. • Peripheral arterial disease. • Trouble with memory or understanding

Diagnosis: • Family history. • Medical history. • Monitoring and recording several blood pressure readings. • Laboratory tests. • Undergoing some tests to rule out any cause or risk factor for high blood pressure.

Treatment: Based on the diagnosis, a treatment plan will be developed. It will include: • Lifestyle changes, such as engaging in regular physical activity and maintaining a healthy diet. • Medication to control high blood pressure.

Prevention: Leading a healthy lifestyle is one of the most important ways to prevent and control blood pressure; this includes: • Exercising regularly. • Maintaining a healthy weight. • Maintaining a healthy well-balanced diet. • Managing stress and anxiety. • Refraining from smoking and consuming alcohol. • Reducing caffeine intake.