



MANAGING HYPERTENSION THROUGH DIAGNOSTICS

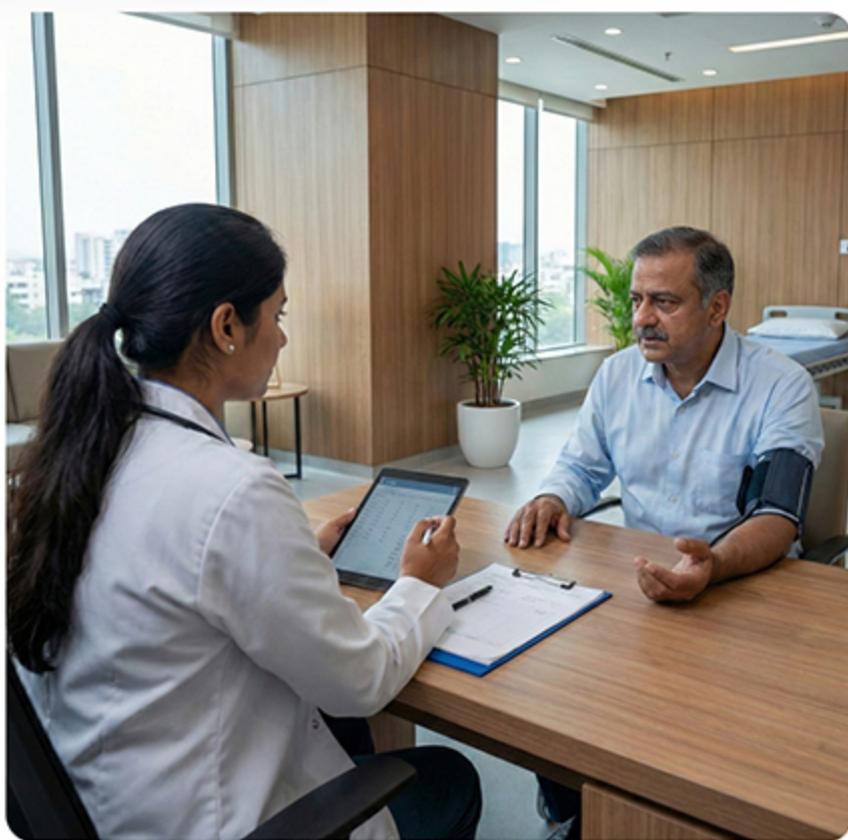
One of the most common diseases nowadays is **Hypertension**, also known as high blood pressure. It is often called a “silent killer” because there may be no noticeable symptoms until serious complications develop. Effective management of hypertension begins with accurate and timely diagnostics, which play a crucial role.

The first step in diagnosing hypertension is regular blood pressure measurement which is usually done using a sphygmomanometer. However home blood pressure monitoring is increasingly encouraged. Multiple readings over different days help confirm the diagnosis, as a single high reading may be influenced by stress, activity or “white coat” hypertension. Ambulatory blood pressure monitoring, which records blood pressure over 24 hours, provides a more comprehensive picture and helps identify masked or nocturnal hypertension.

More diagnostic tests are required to determine the cause of hypertension and assess its impact on the body. Basic blood tests are commonly used to evaluate kidney function, blood sugar levels and cholesterol, as these factors are closely linked to blood pressure control. Urine tests may detect protein or other abnormalities that indicate kidney involvement, a common complication of long-standing hypertension.

Cardiac diagnostics are also key. An electrocardiogram (ECG) can reveal signs of heart strain or rhythm abnormalities caused by persistently high blood pressure. In some cases, an echocardiogram is recommended to assess the heart’s structure and function, especially to detect left ventricular hypertrophy, a condition where the heart muscle thickens due to increased workload.

Imaging studies are opted for if secondary hypertension is suspected. Ultrasound of the



kidneys, CT scans or other imaging techniques can help identify underlying causes such as renal artery narrowing or hormonal disorders. Identifying secondary causes is essential, as treating the root problem can significantly improve blood pressure control.

Diagnostics are vital for ongoing management.

Regular monitoring is essential to assess how well lifestyle changes and medications are working. **Periodic follow-up tests** allow doctors to adjust treatment plans, prevent complications and reduce the risk of heart disease, stroke and kidney failure.

It is clear that managing hypertension effectively is heavily dependent on comprehensive diagnostics. From accurate blood pressure measurement to advanced laboratory and imaging tests, diagnostics guide informed decision-making and personalised care. Early detection and consistent monitoring are vital to control blood pressure.