

What should be included in the Initial evaluation of a hypertensive patient?

The objective of the initial assessment (excluding medical history and examination) of hypertensive patient is to:

1. Detect causes of secondary hypertension (SH)
2. Assess cardiovascular risk (CVR)
3. Assess target organ damage (TOD)

Routine tests:

- Haemoglobin and/or haematocrit. (SH)
- Fasting plasma glucose.(CVR)
- Serum total cholesterol, low-density lipoprotein cholesterol, high-density lipoprotein cholesterol and fasting triglycerides (CVR)
- Serum potassium and sodium. (SH)
- Serum uric acid. (CVR)
- Serum creatinine (with estimation of GFR). (TOD;SH)
- Urine analysis: microscopic examination; urinary protein (TOD;SH)
- 12-lead ECG (TOD)

Additional tests, based on history, physical examination, and findings from routine laboratory tests:

- Haemoglobin A1c (if fasting plasma glucose is >5.6 mmol/L (102 mg/dL) or previous diagnosis of diabetes).
- Quantitative proteinuria (if dipstick test is positive); urinary
- Urinary potassium and sodium concentration and their ratio.
- Home and 24-h ambulatory BP monitoring.
- Echocardiogram.
- Holter monitoring in case of arrhythmias.
- Carotid ultrasound.
- Peripheral artery/abdominal ultrasound.
- Pulse wave velocity.
- Ankle-brachial index.
- Fundoscopy.