- It is impossible to interpret data obtained from patients receiving treatment with mineralocorticoid receptor antagonists (e.g., spironolactone, eplerenone) or high-dose amiloride when PRA is not suppressed. Therefore, treatment with a mineralocorticoid receptor antagonist should not be initiated until the evaluation has been completed and the final decisions about treatment have been made.

- Aldosterone suppression testing can be performed with orally administered sodium chloride and measurement of urinary aldosterone or with intravenous sodium chloride loading and measurement of PAC.

- It is recognized that primary aldosteronism is the most common form of secondary hypertension. Using the plasma aldosterone to plasma renin activity ratio as a case-finding test, followed by aldosterone suppression confirmatory testing, has resulted in much higher prevalence estimates of 5-13% of all patients with hypertension.

- Patients with marked hypokalaemia may have muscle weakness and cramping, headaches, palpitations, polydipsia, polyuria, nocturia, or a combination of these. The polyuria and nocturia are a result of hypokalaemia-induced renal concentrating defect and the presentation is frequently mistaken for prostatism in men.

- The degree of hypertension is usually moderate to severe and may be resistant to usual pharmacological treatments.

- Hypokalaemia is frequently absent; thus, all patients with hypertension are candidates for this disorder.

- Because of a reset osmostat, the serum sodium concentration tends to be high-normal or slightly above the upper limit of normal. This clinical clue is very useful when initially assessing the potential for primary aldosteronism.

- Mineralocorticoid receptor antagonists (e.g., spironolactone and eplerenone) and high-dose amiloride are the only medications that absolutely interfere with interpretation of the ratio and should be discontinued at least 6 weeks before testing. Therefore, treatment with a mineralocorticoid receptor antagonist should not be initiated until the evaluation has been completed and the final decisions about treatment have been made.

- When to Consider Testing for Primary Aldosteronism:
  - Hypertension and hypokalaemia
  - Resistant hypertension
  - Adrenal Incidentaloma and hypertension
  - Onset of hypertension at a young age (≤ 20 y)
  - Severe hypertension (≥ 160 mm Hg systolic or ≥ 100 mm Hg diastolic)
  - Whenever considering secondary hypertension

When PAC/PRA ratio ≥ 565 pmol/l per mg/l per hour (≥ 20 ng/dl per ng/ml per hour)

Investigate for Primary Aldosteronism

- Mineralocorticoid receptor antagonists (e.g., spironolactone and eplerenone) and high-dose amiloride are the only medications that absolutely interfere with interpretation of the ratio and should be discontinued at least 6 weeks before testing.

- Angiotensin-converting enzyme (ACE) inhibitors, angiotensin receptor antagonists (ARB) and diuretics have the potential to 'falsely elevate' PRA. Therefore, in a patient treated with an ACE inhibitor, ARB or a diuretic, primary aldosteronism should be highly suspect.

- Adrenergic inhibitors (e.g., beta-adrenergic blockers and central alpha-2 agonists) suppress renin secretion, but also in turn suppress aldosterone secretion (although to a lesser degree than renin) in normal individuals; thus, although the PAC/PRA may rise in hypertensive patients without primary aldosteronism treated with adrenergic inhibitors, the PAC remains less than 416 pmol/l (15 ng/dl) and the case finding test is not significantly affected.