Ranked causes of Secondary Hypertension

	Secondary cause	When to suspect: history/exam clues	How to investigate
1	**Medication/substance/alcohol-induced**	NSAIDs/COX-2 inhibitors, corticosteroids, SNRIs, stimulants, decongestants, OCP/estrogen, calcineurin inhibitors, VEGF inhibitors, erythropoietin, licorice, cocaine/amphetamines, heavy alcohol; temporal relation to BP rise	Full medication reconciliation including OTC/herbals/recreational drugs; alcohol history; consider urine drug screen where relevant; withdraw/substitute culprit and reassess BP
2	**Obstructive sleep apnoea**	Resistant HTN, obesity, large neck, loud snoring, witnessed apnoeas, daytime somnolence, morning headache, nocturnal/non-dipping HTN. In resistant HTN cohorts, OSA may be very frequent.	STOP-Bang/Epworth; overnight oximetry can triage; confirm with home sleep apnoea test or polysomnography
3	**Primary aldosteronism**	Resistant/severe HTN, spontaneous or diuretic-induced hypokalaemia, adrenal incidentaloma, early-onset HTN/stroke family history, OSA; note many are normokalaemic	Morning plasma **aldosterone** + **renin**, calculate ARR. Correct hypokalaemia first; interpret around interfering drugs. Endocrine Society now suggests PA screening with aldosterone and renin in people with hypertension; local practice may still target high-risk groups. Positive screen → confirmatory suppression test unless florid phenotype; adrenal CT then adrenal venous sampling if surgical candidate
4	**Renal parenchymal disease / CKD**	Diabetes, haematuria, proteinuria, recurrent UTI/reflux, polycystic kidneys, systemic disease, oedema; abnormal renal function or urinary sediment	Creatinine/eGFR, electrolytes, urinalysis, urine ACR/PCR, renal ultrasound; consider autoimmune/vasculitis screen if active sediment; nephrology referral for significant proteinuria, falling eGFR, haematuria/casts
5	**Renovascular hypertension** — atherosclerotic renal artery stenosis or fibromuscular dysplasia	Abrupt onset or worsening HTN, resistant HTN, flash pulmonary oedema, abdominal bruit, asymmetric kidneys, rise in creatinine after ACEi/ARB; FMD more likely young/middle-aged women	Renal artery duplex ultrasound, CT angiography or MR angiography depending renal function/local expertise; catheter angiography if intervention likely
6	**Thyroid disease**	Hyperthyroid: systolic HTN, tachycardia, tremor, weight loss. Hypothyroid: diastolic HTN, bradycardia, weight gain, cold intolerance	TSH ± free T4
7	**Chronic glucocorticoid exposure / Cushing syndrome**	Exogenous steroid use most common; proximal myopathy, easy bruising, wide purple striae, facial plethora, diabetes, osteoporosis, hypokalaemia	First exclude exogenous steroids. Screening options: 1 mg overnight dexamethasone suppression test, late-night salivary cortisol, or 24-hour urinary free cortisol. Abnormal screen → endocrinology referral for ACTH-dependent/independent work-up
8	**Phaeochromocytoma/paraganglioma**	Paroxysmal or sustained HTN with episodic headache, sweating, palpitations, pallor, tremor; adrenal incidentaloma; family syndrome: MEN2, VHL, NF1, SDHx	Plasma free metanephrines, ideally supine/rested, or 24-hour urinary fractionated metanephrines. Positive biochemistry → CT/MRI adrenal/abdomen; genetic consideration.
9	**Coarctation of the aorta**	Young patient; upper-limb HTN with weak/delayed femoral pulses, radio-femoral delay, arm–leg BP gradient, systolic murmur, headaches/claudication	BP both arms and one leg; palpate femorals; echocardiography; CT/MR angiography of thoracic aorta
10	**Primary hyperparathyroidism / hypercalcaemia**	Hypercalcaemia, renal stones, constipation, neuropsychiatric symptoms, osteoporosis; HTN may coexist	Serum calcium corrected/ionised, phosphate, PTH, vitamin D, renal function; manage per PHPT criteria
11	**Monogenic/mineralocorticoid syndromes** — Liddle, apparent mineralocorticoid excess, congenital adrenal hyperplasia, Gordon syndrome	Early-onset severe HTN, strong family history, low renin, abnormal K^+/acid–base pattern: hypokalaemic alkalosis in Liddle/AME; hyperkalaemia/acidosis in Gordon	Renin, aldosterone, K^+, bicarbonate; urine cortisol/cortisone ratio if AME suspected; genetic testing or specialist referral; consider in young patients with suppressed renin and unusual electrolytes
12	**Acromegaly and other rare endocrine/neurogenic causes**	Coarse facial features, enlarged hands/feet, sweating, headaches, carpal tunnel, diabetes, OSA; rare neurogenic causes with raised intracranial pressure/autonomic dysreflexia	IGF-1 for acromegaly → oral glucose suppression/GH and pituitary MRI if positive; targeted neuroimaging/autonomic assessment only if clinical clues