

SIGNS AND SYMPTOMS OF THYROID DISEASE

	Hypothyroidism	Hyperthyroidism
High Suspicion (78%)	Goitre Delayed reflexes	Goitre Thyroid bruit Lid lag Proptosis
Intermediate Suspicion (2.9%)	Fatigue Weight gain/difficulty losing wt Cold intolerance Dry, rough, pale skin Constipation Family History Hoarseness	Fatigue Weight loss despite increased appetite Heat intolerance/sweating Fine tremor Family history Increased bowel movements Fast heart rate/palpitations Staring gaze
Low Suspicion Non specific symptoms (0.45%)	Coarse, dry hair Hair loss Muscle cramps/muscle aches Depression Irritability Memory loss Abnormal menstrual cycles Decreased libido	Nervousness Insomnia Breathlessness Light or absent menstrual periods Weight loss Muscle weakness Warm moist skin Hair loss

LAB EVALUATION OF THYROID DISEASE

Perform TSH			
TSH Elevated		TSH Decreased	
Add FT4		Add FT4 + FT3	
Normal FT4	Low FT4	Elevated FT4 &/or FT3	Normal FT4 & FT3
Consider autoantibodies to assess further risk	Hypothyroidism, consider thyroxine replacement	Hyperthyroidism, consider antithyroid therapy	Clinical review and consider repeat in 6 months

POSSIBLE EXPLANATIONS FOR VARIOUS RESULT COMBINATIONS

	High T4	Normal T4	Low T4
High TSH	<p>Irregular use of thyroxine</p> <p>Amiodarone</p> <p>Pituitary hyperthyroidism (TSH producing pituitary tumour – rare)</p> <p>Thyroid hormone resistance (very rare)</p>	<p>Subclinical hypothyroidism</p> <p>T4 under replacement</p>	<p>Primary hypothyroidism</p>
Normal TSH	<p>As above</p> <p>Some drugs (steroids, beta-blockers, NSAIDS)</p> <p>Non-thyroidal illness</p> <p>T4 replacement (sometimes stabilises with normal TSH and elevated FT4)</p>	<p>Normal</p>	<p>Some drugs (anticonvulsants, anti-T3, anti-T4)</p> <p>Pituitary or hypothalamic hypothyroidism</p> <p>Severe non thyroidal illness</p>
Low TSH	<p>Primary hyperthyroidism</p>	<p>Subclinical hyperthyroidism</p> <p>Subtle T4 over replacement</p> <p>Non-thyroidal illness</p>	<p>Pituitary or hypothalamic hypothyroidism</p> <p>Severe non-thyroidal illness</p>