

Madigan Army Medical Center

Referral Guidelines

Hypothyroidism

Diagnosis/Definition

- Hypothyroidism is the complex of findings that arise when the peripheral tissues are presented with and respond to inadequate levels of thyroid hormone.
- Disorders associated with hypothyroidism may be broadly categorized as follows:
 - Thyroid agenesis.
 - Destruction of the thyroid gland secondary to surgical removal, irradiation, autoimmune disease, thyroiditis, replacement by cancer or other disease.
 - Idiopathic thyroid atrophy.
 - Inhibition of thyroid hormone synthesis secondary to iodine deficiency or excess iodine in susceptible patients.
 - Inhibition of thyroid hormone synthesis from antithyroid drug therapy or inherited enzymatic defects.
 - Transient hypothyroidism occurring in the course of thyroiditis or uncommonly after radioiodine therapy
 - Central hypothyroidism from disruption of the hypothalamic pituitary and thyroid axis.
 - Inadequate replacement therapy in patients with known hypothyroidism.

Initial Diagnosis and Management

- Patients with iatrogenic hypothyroidism need not be referred. Their dose of thyroid hormone should be increased. A TSH should be measured six weeks later.
- An attempt should be made to determine the etiology of the patient's condition based on history and examination findings.
- In addition to a thorough history and physical exam, anti-thyroid antibody titers may be of value. (Note: Thyroid scans and thyroid ultrasounds are not indicated in the evaluation of hypothyroidism).
- Transient forms of mild hypothyroidism often do not require treatment. The patient should be reassured and monitored.
- Serial TSH and FT4 levels should be obtained to document resolution (every 1-3 months).

Ongoing Management and Objectives

- The major objective is to achieve a state of euthyroidism as reflected by a normalized TSH in patients with an intact hypothalamic pituitary thyroid axis.
- In patients with hypothalamic or pituitary disease the objective is normalized free T3 and free T4 levels.
- Adjustments to thyroid hormone dosage should not be made on the basis of symptomatology alone.
- The target TSH is generally 1-2 for patients less than 60 years of age. The target TSH for older patients is generally higher (2-5). The target TSH for patients with heart disease or other systemic illness may be higher still to avoid symptoms.
- A variety of medications and other factors may affect the bioavailability of thyroid hormone. An adjustment to thyroid hormone dosage is not completely reflected in the TSH and free T4 levels for a period of six to eight weeks.

- Patients over the age of 50 years or those with known or suspected coronary disease should begin replacement therapy with a low dose of medication and have this dose gradually increased as tolerated (e.g. levothyroxine, 25 mcg/d starting dose with 12.5 to 25 mcg increases every 2-4 weeks)

Indications for Specialty Care Referral

- In general, patients with hypothyroidism are easily diagnosed and treated. They will not require subspecialty care.
- Certain patients, i.e. those who appear unresponsive to replacement therapy or those with unusual forms or manifestations of hypothyroidism may require referral.
- Patients with central hypothyroidism should be referred for assessment.

Criteria for Return to Primary Care

Euthyroidism or formulation of a plan to achieve euthyroidism in the Primary Care setting.

Last Review for this Guideline: **January 2011**

Referral Guidelines require review every three years.

Maintained by the Madigan Army Medical Center - Quality Services Division
Clinical Practice and Referral Guidelines Administrator