



THYROPEROXIDASE ANTIBODIES UPDATE

Date: January 22, 2008

Subject: Improved TPOAb Test Availability

Dear Valued Clients,

The EMH Reference Laboratory is pleased to announce the implementation of on-site Thyroperoxidase (TPOAb) testing. Testing is now available Monday through Sunday, with a 24-hour reporting time.

The test method or reference range for TPOAb testing will not change. The required specimen is 1 ml of serum drawn in a SST (gold top) or plain red vacutainer tube.

For more information about this announcement, please contact Scott Jenkins, EMH Account Executive at 866-941-4542 ext. 44878.

Clinical Utility of TPO

Autoimmune thyroid disease causes cellular damage and alters thyroid gland function by humoral and cell-mediated mechanisms. Thyroperoxidase is a membrane associated hemoglycoprotein expressed only in thyrocytes. It is uniquely involved in the synthesis of T3 and T4.

TPOAb is considered the most sensitive test for detecting autoimmune thyroid disease. It is typically the first abnormality to appear in the course of developing hypothyroidism secondary to Hashimoto's thyroiditis. Greater than 95% of patients with Hashimoto's thyroiditis and approximately 85 % of Graves' disease patients have detectable levels of TPOAb. In addition, ambulatory patients with a serum TSH repeatedly above 2.5 mIU/L and an elevated TPOAb level may be in the early stages of thyroid failure (subclinical hypothyroidism).¹

EMH Reference Laboratory TPOAb Test

| <i>Test Name</i> | <i>Specimen</i> | <i>Frequency</i> | <i>Test Code</i> |
|----------------------------|----------------------------------|-----------------------------|-------------------------|
| Thyroperoxidase Antibodies | 1 SST (1 ml serum). Refrigerate. | Monday-Sunday | TPO5 |
| <i>Method</i> | <i>Reference Values</i> | <i>Analytic Time</i> | <i>CPT Code</i> |
| Chemiluminometric Assay | <9.0 IU/ml | 24 hours | 86376 |

¹Demers, LM, and Spencer, CA, eds., "Laboratory Medicine Practice Guidelines: Laboratory Support for the Diagnosis and Monitoring of Thyroid Disease." National Academy of Clinical Biochemistry, 2002. (Can be found on the website of the American Association for Clinical Chemistry: www.aacc.org.)