



MEMORANDUM # 75

TO: UNC Hospitals Attending Physicians, Housestaff, Department Heads,
Nursing staff and Supervisors

FROM: *[Handwritten initials]* Catherine Hammett-Stabler, Ph.D., Associate Director, Core Laboratory
John F. Chapman, Dr. P.H, Director, Core Laboratory
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DATE: January 31, 2008

SUBJECT: Changes in Mayo Referral Thyroid Testing

Our primary reference laboratory, Mayo Medical Laboratories, has announced the following changes to antibody testing related to thyroid function effective February 4, 2008. These changes are being made in order to remain consistent with the recommended guidelines from the National Academy of Clinical Biochemistry for the diagnosis and monitoring of thyroid disease, and as the result of improved methodology.

Test	Replaces the previous	Clinical Use	Ordering information
Thyroperoxidase (TPO) Antibody	Thyroid Microsomal Antibody	1. Diagnosis of autoimmune thyroid disorders and differentiation of these from non-autoimmune thyroid disorders: present in 50-90% of patients with autoimmune hypothyroidism and 60-80% of patients with Graves disease; however, also present in ~10% of euthyroid patients. 2. As an aid in the decision to treat subclinical hypothyroidism; patients with subclinical hypothyroidism who have TPO antibodies are at increased risk of developing overt hypothyroidism.	Serum, performed Monday thru Sunday at Mayo
Methodology change			
Thyroglobulin Antibody	Immunoenzymatic assay	1. Follicular-cell derived thyroid carcinomas: Tg antibodies interfere with thyroglobulin measurements used in following patients with follicular-cell thyroid carcinomas. Both false low and false high thyroglobulin results are reported. <u>All samples for the thyroglobulin tumor marker test are automatically screened for Tg Ab to identify samples that would give erroneous results.</u>	Serum, performed Monday thru Friday at Mayo

Methodology change (Continued)			
		2. Tg antibodies may be useful when the clinical suspicion of autoimmune thyroid disease is high but TPO Ab measurements are negative. 30-50% of patients with autoimmune hypothyroidism have Tg antibodies; 15-25% of patients with Graves disease have Tg antibodies.	

The above information will be available on the McLendon Clinical Laboratories on-line manual (<http://www.unchealthcare.org/site/labs>). Contact Referral Testing or Dr. Hammett-Stabler at 966-2361 for any questions.