



Changes In Thyroid Antibodies

The most common cause of thyroid dysfunction is autoimmune. Indeed, autoimmune thyroid disease is the most common autoimmune condition in our community. Thyroid related autoantibodies are useful in supporting autoimmune as the underlying mechanism, particularly where the cause of abnormal thyroid function tests is unclear.

In patients with hypothyroidism, in terms of specificity, anti-thyroid microsomal or peroxidase antibodies (anti-TPO) is the most helpful autoantibody to order when autoimmune (Hashimoto's) thyroiditis is suspected. However, like many autoantibodies, it can be detected in many patients' years before the onset of clinically overt hypothyroidism. Studies have shown that those with positive anti-TPO antibodies and normal thyroid function are at greater risk than the general population of developing hypothyroidism in the future.

Although commonly ordered, anti-thyroglobulin (Tg) antibodies are less specific for the diagnosis of autoimmune thyroid disease and can be found in a number of other conditions including thyroid carcinoma where its presence can be helpful in monitoring recurrence after thyroidectomy or radioactive thyroid ablation. Given the superior clinical utility of anti-thyroid microsomal (anti-TPO) antibodies, and bringing our testing in line with other local and national laboratories, when thyroid antibodies are ordered rather than performing both anti-TPO and anti-Tg antibodies, **Pathlab will perform anti-thyroid microsomal (anti-TPO) antibodies only. This will be introduced in early September 2016.**

The patient's sample will however be stored for a period of 1 month. If anti-Tg antibodies are thought to be clinically helpful for the diagnosis of a particular patient, this may be requested via the normal Test Add protocol – email plw.testadd@pathlab.co.nz or fax 07 858 0879.

Anti-thyroglobulin antibodies will be routinely performed when thyroglobulin has been performed in patients with thyroid cancer as the antibody can interfere with the assay leading to falsely low results.

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CLINICAL UPDATE