

TSH RECEPTOR ANTIBODY. THE CLINICAL APPROACH

It is generally accepted that antibody to thyrotropin receptor (TRAb) with stimulatory activity is the major pathogenetic factor in development of Graves' disease. Although, testing of these autoantibodies is not a routine analysis in clinical practice. Aim of this paper is to analyze and present some modalities in clinical protocols for diagnosis, differential diagnosis and follow-up of treatment of Graves' disease. Authors are presenting own experience in these clinical circumstances.

For verification of hyperthyroid state in Graves' disease clinician uses clinical symptoms and signs, thyroid hormones blood levels, and usually ultrasonography of thyroid gland. Many of these methods do not have adequate sensitivity nor specificity especially for confirmation of autoimmune etiology (endocrine ophthalmopathy is present in only 50% patients with Graves' disease). Sensitive and specific method as the new generation TBII assay is (TRAb Dyno Human) identifies presence of TRAb in 98% these patients (diagnostic accuracy almost 99%). Differentiation between autoimmune and other forms of thyrotoxicosis (autonomous hyperthyroidism, destructive thyroiditis, iodine induced hyperthyroidism etc). is possible by this single testing.

In actual (immunologic) remission antithyroid medicaments induce TRAb decrease to negativity. If TRAb stay positive (about 30% in our experience) patients are candidates for relaps – prediction of therapeutic response.

Follow-up of TRAb in pregnancy is important predictive parameter for thyroid immune disease in newborn infants.

In author's opinion, presented results justify TRAb determination in various clinical circumstances.

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