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THE ISSUE OF MEDICAMENT TREATMENT WITH HIGH DOSES OF METHIMAZOLE ON SERUM LEVEL OF TSH-RECEPTOR ANTIBODIES IN PATIENTS WITH GRAVES' DISEASE PREVIOUSLY TREATED WITH TITRATION DOSES

(High doses of methimazole and TRAb level in Graves' disease)

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Abbreviations: TSH-R        Receptor for Thyrostimulating hormone  
TSH-R Ab    Antibodies to TSH receptor  
TRAb        Antibodies to TSH receptor  
TBI         Thyrocytes Binding Inhibition  
TBII        Thyrocytes Binding Inhibition Immunoglobuline

ABSTRACT

Authors have previously reported the effect of the treatment with antithyroid drugs (methimazole) on increased TSH-receptor antibodies (TRAb) serum level in patients with Graves' disease. Findings have disclosed that after 18-12 months of medicament treatment with "titration doses" of methimazole, about 60% of the patients become TRAb negative while 40% of the patients remained TRAb positive. In this investigation an attempt is made to treat some of the patients with persistently high TRAb findings, after the termination of 18 months titration doses therapeutic regimen, with high (immunosuppressive?) doses of methimazole, including substitution with L-thyroxin. Twelve patients (2 males and 10 females, age average 33 years) have been treated. After the completion of "conventional" treatment of methimazole (average duration of 19,3 months) all 12 patients had elevated findings of TRAb in serum (average 136 U/l) and normal findings of "free" thyroid hormones. Six patients had maximally suppressed "ultrasenzitive" TSH. High doses (1 mg per kg of body weight) were prescribed to each of 12 patients. Substitution doses of L-thyroxin were applied when patients developed hypothyroidism. All patients were on clinical and laboratory follow-up (including frequent control of TRAb) for average of 16,5 months. At the end of this period average serum level of TRAb was significantly lower for the group, mean value 53 U/l, but only one patient achieved normalization of the TRAb (below 15 U/l), and the two patients had borderline levels. This study is continuing but our present findings did not support, nor excluded, expectation that high doses of methimazole may normalize TRAb in patients with Graves' disease previously resistant to conventional therapy with "titration doses".

Key words:

hyperthyroidism, methimazole, high doses, TSH-R antibodies