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| **Title:** |
| **Switch from Hashimoto Thyroiditis (HT) to Graves Basedow (GB) disease:**  **a controlled study in a series of 15 patients** |
| **Abstract:** (Your abstract must use Normal style and must fit into the box. Do not enter author details) |
| **Aim:** To study the clinical and biological characteristics of patients with Hashimoto hypothyroidism that “switched” to hyperthyroidism due to GB disease (group A) and to compare them to a control group with HT only (group B).  **Patients and Methods**: During L-Thyroxine treatment, Group A (14E/1 H, 23-63 years) developed, after 42±36 months, clinical, biological and scintigraphic criteria of GB disease. Group B was matched for age and sex: they were followed up during 40 ±30 months (p > 0.05). At the inclusion, hypothyroid patients had similar TSH and FT4 levels (group A vs B, p > 0.05). TPO antibodies and L-Thyroxine posology were higher in Group A (TPO: 190 ±150, T4 dose: 68±65 μg/J) than in Group B (47±5 ±8, p < 0.01). Group A developed hyperthyroidism (TSH < 0.01, T4 24±9 pg/ml) with a mean TBII: 9.8 9 U/L (VN < 2). Hyperthyroidism was controlled with radioiodine in three patients and with Propylthyouracil in 12 patients. Three patients had a moderate GB ophthalmopathy.  **Conclusions:** The conversion of Hashimoto hypothyroidism to GB hyperthyroidism is unusual: it should not be confused with Hashi-thyrotoxicosis. Switching between TBAb (competitive inhibitors of TSHR causing hypothyroidism) and TSAb (TSHR stimulating Ab) may occur in these patients. Both higher TPO Ab levels and L-Thyroxine doses can be a risk factor for this “switch” phenomenon. Immunological and genetic studies in larger cohorts of these unusual patients could provide unexpected and valuable information regarding the basis for thyroid autoimmunity. |