The thyroid gland influences numerous functions such as reproduction, energy balance, metabolism as well as skeletal and central nervous system development. A 33 year old, G2 P1 woman was admitted at 21 weeks of gestation for hyperthyroidism. Hyperthyroidism was also reported during her first pregnancy. Biological examination revealed undetectable TSH, increased levels of thyroglobulin antibodies, thyroid stimulating hormone receptor antibodies and thyroid peroxidase antibodies. Ultrasound thyroid scan showed a thyroid structure suggesting Hashimoto's disease in the lytic stage and a macronodula. Fine needle aspiration of the later showed no sign of malignancy. During the pregnancy, the patient spontaneously returned to an euthyroid status. At 35 weeks of gestation, the patient delivered a preterm baby with no major neonatal complications. Tests performed post partum showed a new episode of hyperthyroidism. 99MTc scintigraphy showed a high avidity for the tracer. It was concluded that the patient's Hashimoto disease had transformed to Grave's disease. The patient underwent 131Iodine treatment, resulting in hypothyroidism. Levothyroxine replacement therapy was therefore started. Her current pregnancy is hindered by the recurrence of hyperthyroidism during the first trimester. The TSH level is once again undetectable. A close maternal and fetal ultrasound follow-up is organized, as fetal complications have been described. Euthyroidism is a prerequisite to a safe pregnancy. Grave's transformation of a Hashimoto disease as well as Grave's recurrence during pregnancy after 131Iodine pre-pregnancy treatment are not frequent. PTU and methimazole can be used during pregnancy while 131Iodine treatment is forbidden. Hyperthyroidism during the pregnancy requires a close follow-up until clinical and biochemical normalization.