



# HYPERTHYROIDISM IN A PREGNANT WOMAN WHO HAD HYPOTHYROIDISM DUE TO HASHIMOTO DISEASE BEFORE



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## INTRODUCTION

- Pregnant women with known hypothyroidism must have monthly follow up with thyroid function tests. Appropriate L-thyroxin replacement dose can be given due to trimester specific thyroid stimulating hormone (TSH) levels.
- We will discuss about a hyperthyroid pregnant woman who was taking L-thyroxin replacement before and during the first trimester of pregnancy for hypothyroidism.

## CASE

- A 24 year old woman admitted to our out-patient clinic for fatigue and weight gain. She had a family history of Hashimoto thyroiditis.
- Her TSH was 10.13 uIU/mL (0.27-4.2), free T4 was 1.27 ng/dL (0.9-1.7), free T3 2.98 pg/mL (1.8-4.6), anti thyroid peroxidase antibody (TPO Ab) was 11.8 IU/mL (0-34) and anti thyroglobulin was 17.27 IU/mL (0-115).
- Her thyroid ultrasonography was compatible with chronic thyroiditis.
- L-thyroxin replacement was started after Hashimoto disease diagnosis. After euthyroidism achieved she became pregnant. With monthly follow up L-thyroxine dose adjusted.
- On the 20th week of pregnancy thyroid function tests revealed thyrotoxicosis.
- Despite cessation of L-thyroxin treatment thyrotoxicosis persists and when we take the titer of thyrotropin receptor stimulating antibody (TSHR Ab) it was 405 u/L (0-14).

- There was no opthalmopathy on physical examination. Propylthiouracil treatment was started. And she had a healthy boy baby with no obvious thyroid dysfunction.

Table. Thyroid hormone levels of patient s

	TSH	ft4	ft3
Prepregnancy	10,13	1,27	2,98
11 th week (while taking L-thyroxin)	3,13	1,46	2,89
20 th week (L -thyroxin stopped)	0,02	1,89	6,23
26 th week (PTU started)	0,006	3,24	12,13

## CONCLUSION

- TSHR Ab is responsible for two distinct clinical syndromes. Stimulating antibodies (TSAb) cause thyrotoxicosis when blocking antibodies(TBAb) cause hypothyroidism.
- Antibody switch can occur during some periods one of which is pregnancy. The etiology of this process remains unknown but hemodilution of TBAb titer can be one of the possible mechanisms.
- This is at least one of the important issues that close follow up is mandatory during pregnancy.