

A symptomatic young lady with suppressed TSH and normal free hormone levels- when and how to treat?

Disorders of the thyroid gland

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A 26 year old lady was referred to the endocrine clinic in November 2006. She gave a history of feeling generally unwell with poor sleep and occasional palpitations. She has a strong family history of thyroid disease (her mother and a sister having a history of Grave's thyrotoxicosis). She has two children aged 9 and 6 years and suffered a miscarriage in April 2006. The patient expressed that she was considering extending her family further.

Examination at the time of presentation revealed the patient to be clinically euthyroid and examination of the neck was unremarkable. She had no signs of thyroid eye disease. Investigations arranged by her GP prior to referral are reported to have shown a suppressed TSH, normal free T4 and a borderline elevated free T3 level. Thyroid autoantibodies (anti TPO) were strongly positive. Repeat thyroid function tests in the clinic showed a suppressed TSH but normal free hormone levels.

Initially a watch and wait approach was adopted. She was reviewed on a regular basis with TFTs. Her serial TFTs and weight are shown in the table below. At her follow up appointments she reported on-going symptoms of tiredness, mild anxiety and occasional palpitations. Her weight showed a gradual reduction. Clinically in June 2007 she had a slight tremor but a regular pulse of 88 beats per minute and she was otherwise euthyroid. At this stage, on the basis of her symptoms and mildly elevated free T3, she was started on propylthiouracil 50mg twice daily. Unfortunately she developed itchiness several weeks after starting treatment and the patient stopped taking her treatment without contacting medical advice. She has subsequently been reviewed back in clinic. She remained symptomatic with further weight loss. Although her free hormone levels are within normal limits she has been advised to restart the propylthiouracil as above with cetirizine treatment to cover itch.

Date	Weight (Kg)	Free T3 (3.5-6.7) pmol/l	Free T4 (11.0-24.0) pmol/l	TSH (0.30-5.50) mU/L
26/11/06	76.9	6.1	16.3	<0.01
05/01/07		6.3	17.8	<0.01
28/02/07		5.8	15.1	<0.01
22/03/07	76.2	6.4	17.4	<0.01
03/05/07		6.1	14.6	<0.01
22/06/07	73.0	<b>7.1</b>	15.5	<0.01
31/07/07		<b>7.3</b>	18.8	<0.01
13/09/07	71.9	5.4	14.8	<0.01

