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Dr Ciin's special interests include:

- Thyroid, Parathyroid
- Adrenal
- Pituitary
- Obesity
- Osteoporosis
- Diabetes (including Gestational)
- Also Diabetes and Endocrine related problems during pregnany and post-partum

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Hashimoto's Disease

A Case Study by By Dr Louise CH Ciin

A 31-year-old mother of two young kids, presents with a six-month history of extreme tiredness, fatigue and 2kg weight gain despite eating the same diet and having the same level of physical activity. Blood tests showed FT4- 10 pmol/L (10-20); TSH- 6.2 mIU/L (0.5-4.0); TPO was 510 iu/mL (<60); and Tg 85 iu/mL (<60).

What is Hashimoto's disease?

This is an autoimmune disease found by a Japanese doctor called Dr Haraku Hashimoto's (1881-1934). He extracted thyroid tissue samples from goitres of four middle-aged women and discovered new pathological characteristics of goitrous lymphocytic infiltration of the thyroid which, in 1912, he named "struma lymphomatosa". Two of the women had hypothyroidism.

Hashimoto's disease is the most common cause of hypothyroidism, clinically characterised by gradual thyroid failure in 10 percent of the population, with or without goitre formation. This occurs more commonly in women than men (7:1 ratio) and its symptoms vary from person to person.

Patients who have high serum thyroid autoantibodies (TPO & Tg) have lymphocytic infiltrate in the thyroid gland at autopsy with or without history of thyroid failure. Therefore, the presence of serum thyroid autoantibodies may be sufficient evidence for Hashimoto's disease with/without thyroid failure, with/without goitre formation.

Not everyone with Hashimoto's disease requires treatment - only those who develop thyroid failure. Among patients who have mild (subclinical) hypothyroidism, overt hypothyroidism occurs at a rate of approximately five percent per year. Overt hypothyroid, once present, is permanent in nearly all cases except in children and postpartum.

Treatment of Hashimoto's disease

The recommended treatment for hypothyroidism is synthetic thyroxine. TSH level needs repeating 6-8 weeks after commencement of thyroxine or after dose adjustment. Once the stable dose of thyroxine is established, TSH levels need checking yearly.

It is not necessary to repeat thyroid antibodies or perform thyroid ultrasound in the treatment of Hashimoto's disease, unless a thyroid nodule or lymph nodes are palpable.

Patients who are over 65 or have history of angina/ischaemic heart disease, should commence with a very small dose of thyroxine. Women who are seeking fertility or who are pregnant may require specialist input.

TSH level	FT4 level	Symptoms	Treat
Normal			No
High	Normal	No symptoms	No - monitor TFT
High	Normal	Symptomatic	Yes
High	Low		Yes

Our index case had developed Hashimoto's thyroiditis with subclinical hypothyroidism. Although some cases of subclinical hypothyroidism can resolve spontaneously she was treated with a small dose of thyroxine as she was symptomatic. Her symptoms resolved as her thyroid function returned to normal.

Note: Adults (non-pregnant) who develop subclinical hypothyroidism but negative TPO (i.e. non-Hashimoto's) may not require treatment unless TSH rises >10 mIU/L.