



**Wolverhampton
Diabetes Care**

Hyperthyroidism (Overactive Thyroid Gland)

What is hyperthyroidism?

A normal thyroid gland produces a hormone called thyroxine. A normal blood level of thyroxine is required to maintain good health. Hyperthyroidism leads to an increase in blood level of thyroxine leading to ill health.

How common is this condition?

About 2 in 100 women, and 2 in 1000 men, develop hyperthyroidism at some stage in their life.

What leads to an overactive thyroid?

The commonest form of overactive thyroid is caused by an inflammation of the gland (Graves' disease), the precise reason for which is not clearly understood. It can occur in several members of the same family.

What are the common symptoms of hyperthyroidism?

- Patients may have several of the following symptoms: swelling in the front of the neck, weight loss, feeling warm, excessive sweating, irritability, difficulty in sleeping, diarrhoea and palpitation.
- Eye symptoms in the form of bulging eyes, watering, grittiness, double vision and painful eye movements can occur.
- Women may have disturbances in menstrual cycle and difficulty in conceiving.
- Some patients may have very few symptoms and the condition may be detected during routine blood tests.

How is the diagnosis confirmed?

Diagnosis is made by a simple blood test which shows a rise in the level of the thyroid hormone.

How is this condition managed?

Hyperthyroidism usually requires treatment. If left untreated, in certain patients it can lead to irregular heart rhythm and thinning of bones over a period of time. There are 3 ways of managing this condition:

Medical treatment:

- This involves taking tablets of Carbimazole or Propylthiouracil. After the initial 6-8 weeks of this treatment thyroxine tablets may be added.
- Blood tests are required during treatment to adjust the dose of medications.
- Medical treatment is usually withdrawn after 6-8 months although this period may vary. After stopping the tablets, blood tests are required 2-3 times during the first year and thereafter annually or during recurrence of symptoms.
- In some patients who develop recurrence of the condition on stopping the treatment, long term use of these tablets may be necessary if radioiodine or surgery are not appropriate.

What are the side effects of the tablets?

Both agents are safe and are well tolerated. Minor side effects include joint pains, nausea and skin rashes although the latter can be more severe and may require withdrawal of treatment.

A major side effect of these drugs is a reduction in the number of white cells of the blood. Although rare (1 patient in 5000), this can be serious if not detected early and the instructions below need to be followed.

If you develop a severe sore throat, fever or mouth ulcers while being on either Carbimazole or Propylthiouracil, you should immediately discontinue the medication and go to your General Practitioner for a blood test. If the blood test is abnormal you should not restart Carbimazole or Propylthiouracil and follow your General Practitioner's advice. If the blood test is normal you should promptly restart the medication without waiting for the above symptoms to clear up.

Surgery:

Thyroid surgery involves the removal of the whole or part of the thyroid gland. It is recommended for patients who have recurrence(s) of hyperthyroidism and are not suitable for long-term tablets or radioiodine therapy. The operation is performed by specialist surgeons and complications are uncommon which would be discussed by your surgeon in greater detail.

Patients who undergo removal of the whole of the thyroid gland require lifelong thyroxine tablets.

Which of the three forms of treatment would be best suited to me?

The choice of treatment depends on a variety of medical factors and on your choice. Medical therapy is the preferred option for a majority of patients who experience this condition for the first time. For those patients who relapse after withdrawal of medical therapy (half of all patients) radioiodine or thyroid surgery is usually recommended although long-term medical treatment can also be considered.

What are the implications of this condition for pregnancy?

Both the condition itself and its treatment may have an impact on pregnancy. Once having been diagnosed to have this condition it is considered safe to be pregnant only when:

- the condition is cured and treatment is withdrawn, or the condition is controlled on small doses of medication (less than 20mg Carbimazole).
- more than 6 months have passed since successful radioiodine therapy (and the resulting underactive thyroid condition has been controlled).
- Surgical treatment has cured the condition (and the resulting underactive thyroid condition has been controlled).

What is the likely outcome (prognosis) of this condition?

With appropriate treatment the prognosis is good. Treatment may lead to an underactive thyroid which is easy to treat with lifelong thyroxine tablets.

What follow up care is required?

Once the condition is cured, 6-12 monthly blood tests should be undertaken to assess the thyroxine balance. If you are in the child bearing period and are on thyroxine tablets you should increase the dose by 50mcg as soon as you are aware that you are pregnant. Please get in touch with your General Practitioner as well.

If you have any concerns or questions once you have read this leaflet you can speak to your doctor at your next hospital appointment.

For more information you can visit:
www.british-thyroid-association.org

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