Information and advice for patients

Endocrinology

What is hypothyroidism?

Hypothyroidism, also called an underactive thyroid, is when the thyroid gland releases fewer hormones than normal. The thyroid gland is in the neck and releases hormones which help control growth and the way your body uses energy. When your thyroid gland isn't releasing enough of these hormones your body starts to slow down, both physically and mentally.

4 in 1000 people have hypothyroidism and it is more common in women than men.

What causes hypothyroidism?

Hypothyroidism can be caused by:

- Your body's immune system confusing the cells in your thyroid gland for foreign cells and attacking them. This is called an autoimmune reaction and is the most common cause of hypothyroidism. Hashimoto's disease is a type of autoimmune reaction that usually causes hypothyroidism.
- Having too much or too little iodine in your body, which can be because your body is not producing enough iodine or/and because you do not eat enough foods that contain iodine.
- Taking a high dose of anti-thyroid medication or having radio-iodine treatment as a treatment for hyperthyroidism (where your thyroid gland produces too much thyroxine).
- Having surgery for thyroid cancer.
- Taking other medications such as lithium and amiodorone.
- A problem with your pituitary gland. The pituitary gland is just under your brain and releases a hormone that controls how much thyroxine your thyroid gland makes.

Some babies are born with hypothyroidism because their thyroid gland did not develop properly. This is called congenital hypothyroidism.

What are the symptoms of hypothyroidism?

The symptoms of hypothyroidism can develop very slowly and include the following:

- Feeling tired more than usual
- Feeling cold more than usual
- Your skin becoming dry and thick
- Your hair becoming thin
- Your voice becoming hoarse or croaky
- Constipation
- Muscle weakness or pain

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- Pins and needles in your fingers and hands
- Weight gain
- Your face becoming puffy or developing bags under your eyes
- Thinking, talking or moving more slowly than usual
- Low mood
- Memory problems
- Slow heartbeat or slightly raised blood pressure
- In women, periods becoming heavier and longer, or stopping early

How is hypothyroidism diagnosed?

Hypothyroidism is diagnosed with a blood test which checks the levels of hormones in your blood.

How is hypothyroidism treated?

Hypothyroidism is treated with thyroxine tablets, also called Levothyroxine. Thyroxine is an artificial hormone that is similar to the hormone made naturally in the body. Most people need to take thyroxine tablets for the rest of their lives.

Most people need to take 50 – 100 micrograms of thyroxine to start with. You will then have a blood test to check the level of thyroxine in your blood. Your doctor may then increase the amount of thyroxine you need to take gradually, until your blood test shows that you have the right amount of thyroxine in your body and you are feeling better.

What are the benefits of taking thyroxine?

The benefit of taking thyroxine is that it will replace the thyroxine that your thyroid gland isn't producing well enough, which will resolve any symptoms you are experiencing.

What are the risks of taking thyroxine?

The thyroxine you take as a tablet is similar to thyroxine naturally made in the body so is unlikely to cause any problems, however there is a risk you could experience some side effects from taking it. Side effects usually only occur when people are taking high doses of thyroxine, and include:

- diarrhoea
- vomiting
- chest pain
- an irregular or fast heartbeat

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- tremor (shaking)
- restlessness
- difficulty sleeping
- excessive sweating
- unexplained weight loss

If you experience any of these side effects and are worried, please see your GP.

There is a risk that if you take too much thyroxine you will develop hyperthyroidism, which is when there are too many thyroid hormones in your body. To reduce the risk of this happening you should have regular blood tests to check the level of thyroxine in your blood.

What are the risks of not getting treatment?

If you choose not to have treatment for hypothyroidism then your hypothyroidism will become worse and your symptoms will become more severe. Eventually you could go into a coma which can be life-threatening.

Are there any alternatives to taking thyroxine?

There are no other treatments for hypothyroidism.

Contact details

If you have any questions or concerns about your hypothyroidism or the treatment please speak to your GP, consultant or specialist nurse.

You can contact your consultant or specialist nurse by calling the hospital switchboard, holding to speak to an advisor, and asking for them.

Hospital switchboard

0121 554 3801

Further information

For more information about hypothyroidism:

NHS Choices

www.nhs.uk/conditions/Thyroid-under-active

Patient UK

www.patient.co.uk/health/hypothyroidism-underactive-thyroid

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For more information about our hospitals and services please see our website www.swbh.nhs.uk, follow us on Twitter @SWBHnhs and like us on Facebook www.facebook.com/SWBHnhs.

Sources used for the information in this leaflet

- British National Formulary, section 6.2.1 'Thyroid hormones', accessed online May 2013
- Ballinger, 'Essentials of Kumar and Clark's Clinical Medicine', chapter 14, 5th edition, 2012
- National Institute for Health and Care Excellence, Clinical Knowledge Summaries, 'Hypothyroidism', February 2011
- Oxford University Press, 'Oxford handbook of clinical medicine', chapter 5, 8th edition, 2010
- The Royal College of Physicians, 'The Diagnosis and Management of Patients with Primary Hypothyroidism', 2009
- British Thyroid Association, 'UK Guidelines for the use of thyroid function tests', 2006
- Ward and Linden, 'Physiology at a glance', chapter 6, 2nd edition, 2005

If you would like to suggest any amendments or improvements to this leaflet please contact the communications department on 0121 507 5303 or email: swb-tr.swbh-gm-patient-information@nhs.net



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