Thyroid disease more common in women

HORMONES that lead to weight gain

Common types of thyroid disease

There are several types of thyroid disease with the most common being hypothyroidism. Hypothyroid disease is when the thyroid gland is not producing the proper amount of hormones. This can result in a number of symptoms, such as fatigue, weight gain, and cold intolerance. In some cases, hypothyroidism can also cause a goiter, which is an enlargement of the thyroid gland.

Hormones affected

The thyroid gland produces a variety of hormones that are important for normal body function. The most important hormones produced by the thyroid gland are:

- Thyroxin (T4): This hormone is produced in the thyroid gland and is responsible for regulating the body's metabolism. It is the hormone that is most affected in hypothyroidism.
- Triiodothyronine (T3): This hormone is produced from T4 and is responsible for regulating the body's metabolism in the brain and nervous system.
- Calcitonin: This hormone is produced in the thyroid gland and is responsible for regulating the blood calcium levels.

Causes of hypothyroidism

Hypothyroidism can be caused by a number of factors, including:

- Autoimmune disease: The immune system attacks the thyroid gland, resulting in reduced hormone production.
- Radiation therapy: Radiation therapy can damage the thyroid gland and reduce its ability to produce hormones.
- Thyroid surgery: Surgical removal of the thyroid gland can result in hypothyroidism.
- Medical conditions: Certain medical conditions, such as Hashimoto's thyroiditis, can cause hypothyroidism.

Symptoms of hypothyroidism

Hypothyroidism can cause a number of symptoms, including:

- Fatigue
- Weight gain
- Cold intolerance
- Dry skin
- Hair loss
- Constipation
- Dry eyes
- Menstrual irregularities

Treatment for hypothyroidism

The treatment for hypothyroidism is usually lifelong and involves taking thyroid hormone replacement therapy (THT). This therapy involves taking medications that contain thyroid hormones, such as levothyroxine. These medications help to replace the hormones that are not being produced by the thyroid gland.

Polycystic Ovarian Syndrome

Polycystic Ovarian Syndrome (PCOS) is one of the most common hormonal disorders in women of reproductive age. It affects approximately six to 20 per cent of women in this age group, which varies by type of criteria used (see table).

University of Malaya, Faculty of Medicine Department of Medicine senior lecturer and consultant Endocrinologist Dr Lee Ling Lim explained that PCOS is a combination of androgen (male hormones particularly testosterone) excess and ovarian dysfunction in women.

The common symptoms include irregular or no menstruation, subfertility, acne and hirsutism (excessive male-pattern terminal hair growth at the facial, upper arm, chest, below umbilicus and inner thigh areas), she said.

Practitioners can grade the severity of hirsutism according to the modified Ferriman–Gallwey score using available charts. A typical feature of insulin resistance is the presence of dark, thickened skin around the neck, axilla and in the skinfolds of the amputis.

To date, there are three well-standardised diagnostic criteria for PCOS. Other causes of androgen excess need to be excluded before a PCOS diagnosis is made.

The clinical presentation of PCOS is heterogeneous. Once a woman is diagnosed, she is classified into either subtype:

- Classic PCOS: presents with both androgen excess and irregular menstruation, irrespective of the presence of polycystic ovaries (most severe type)
- Ovulatory PCOS: presents with androgen excess and polycystic ovaries
- Non-hyperandrogenic PCOS: presents with irregular menstruation and polycystic ovaries (least severe phenotype)

TREATMENT of PCOS is symptom-oriented and needs to adapt to personal needs. No drugs are currently approved specifically for PCOS.

Birth control pills containing an anti-androgenic or neutral progesterin can help to reduce the production and release of androgen from ovaries. They can also increase the sex-hormones binding globulin level, leading to a decrease in free androgen level in the blood. It is the first line management for hirsutism, acne and irregular menstruation of PCOS. Practitioners consider using birth control pills for six months. If fails, anti-androgen is added.

Hirsutism: Cosmetic techniques such as plucking, shaving and waxing with topical and/or oral drugs depending on their severity. Drugs are only for women who are not attempting to conceive such as eflornithine, which discussion with a practitioner is required.

Acne: Cosmetic techniques include laser/light therapy or cosmetic surgery for severe scarring. Drugs are only for women who are not attempting to conceive such as retinoids whereby discussion with a practitioner is required.

Anti-androgen (such as cyproterone acetate, spironolactone, finasteride) can treat hirsutism.

To be used if not attempting to conceive. However, appropriate contraception is needed.

Regular screening for complications include blood sugar test, cholesterol test, blood pressure monitoring, BMI and waist measurements, history of depression and anxiety and history of obstructive sleep apnea.

Insulin resistance: Weight loss: lifestyle modification. Consider anti-obesity drugs and metabolic surgery. Can help with menstruation too. Metformin can be used in women with PCOS and type 2 diabetes/prediabetes who failed lifestyle modification.

Desire to conceive:

- Weight loss
- Discuss about methods of ovulation induction with fertility specialists

Women menstruate, which means we have hormone cycles. And in a perfect world, these cycles make us feel great the entire month. But in a not so perfect world, hormone imbalances occur driving estrogen dominance. And this makes sense — since stress drives progesterone down and allows for estrogen to move about the body unchallenged. You see, there is this delicate balance among all the hormones and without enough progesterone that estrogen is not blocked from affecting your tissues," she added.

Estrogen has the ability to enhance the inflammatory process of the immune system. This means estrogen could contribute to the attack on the thyroid.

The interaction between our fluctuating hormones and the immune system might be the very thing that puts us at risk.

It is well documented that pregnancy puts stress on the thyroid gland, as the demand for thyroid hormone increases following conception. Hypothyroidism can occur anytime during the pregnancy and should be monitored for that reason.

But one common thyroid secret is that giving birth can be a trigger for autoimmune thyroid disease. In fact, studies have shown that as many as one in 12 women develop postpartum thyroiditis.

The shift in hormones and the immune system both during and after pregnancy put women at risk of developing a thyroid condition.
Get a great workout in 10 minutes

OUR limp vessels can become clogged with protein deposits and this can cause a stagnation in the flow. When this happens, a person can develop fatigue, stress, get easily infected, suffer emotional problems such as becoming depressed, irritable, tired which leads to a lack of physical activities and water retention.

Gleneagles Kuala Lumpur Family Medicine specialist Dr Marieanne Sundram pointed out that this is quite common in women in their 40’s and above, where they feel bloated and gain weight, which would affect a woman’s self-confidence.

“Consequently, these toxins accumulate and your bodily cells are unable to function properly. This results in various metabolic disorders and infections. Once you hit 40, all your good hormones starts to decrease by 10 per cent. That’s why you notice and feel your body slowing down, feel tired easily, blood sugars start going up, blood pressure is also on the rise.”

“As you go into the next 10 years, your hormones will decrease another 10 per cent. So, you see yourself slowing down much more,” she said.

The symptoms could be reduced by frequently exercising while decreasing the consumption of fast foods, coffee intake or aerated drinks.

“Instead, invest more in vegetables, fresh fruits and drink more water. A simple 30 minute brisk walk will help as it will circulate the lymphatic systems which helps in the immunity, helps with water retention and bloating.”

“Once you start exercising, your heart would also start clearing all the blockages.”

Our sluggish lymphatic system for women above 40

By POOVENRAJ KANAGARAJ

A 2017 report ‘In Management of Thalassaemia’ released by the Ministry of Health Malaysia Development Division, Health Technology Assessment Unit, Thalassaemia is the commonest single gene disorder in Malaysia with 8,000 persons infected with HBE beta Thalassaemia and 8,000 with Homozygous beta-Thalassaemia as of 1995.

Often known as an inherited blood disorder in which the body makes an abnormal form of haemoglobin, Thalassaemia is a disorder that results in an excessive destruction of red blood cells which leads to anaemia. Degree of anaemia depends on the disorder itself, leading back to the type of thalassaemia you carry.

A disorder stemming from inheritance, this would mean at least one parent must be a carrier where the usual cause is by a genetic mutation or by deletion of key gene fragments.

Columbia Asia’s Consultant Obstetrician & Gynaecologist, Dr Yip Khar Weng explained that Thalassaemia is a type of haemoglobinopathy where in the normal blood cells, there are two alpha chains and two beta chains.

“Alpha thalassemia meaning that there is a defective formation of the alpha chain while beta Thalassaemia is a defective formation of the beta chain.”

“In a normal human being, blood will live for 120 days. However when it comes to Thalassaemia carriers, their blood will see an earlier depletion often lesser than 120 days. Common symptoms are bone deformities, dark urine, delayed growth development and excessive tiredness and fatigue.”

Iron chelation therapy has shown to excrete iron from blood transfusion so without the extra deposition of iron, the body is in a much better condition. Babies with major Thalassemia however are still in need of regular blood transfusion.

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Thalassemia – an inherited blood disorder

Get a great workout in 10 minutes

Too busy for the gym? Just 10 minutes can burn nearly 100 calories and boost your energy level by up to 18 per cent. Try this compressed routine:

Minutes 0:00-0:59: Climb stairs - walk, run, or sprint

Minutes 1:00-1:29: Do reverse lunges with overhead presses (lunge backward, lifting arms overhead with each lunge; alternate sides).

Minutes 1:30-2:00: Do squats.

Repeat the circuit four more times.

Beginners may want to incorporate 30 seconds of rest between each cycle.

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