



EXPERT'S CORNER: A PERSONAL APPROACH

Thyroid and obesity



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In everyday clinical practice, it is quite common to find patients suffering from obesity. Many of them think that their weight problem is a result of a thyroid dysfunction.

Obesity is a highly prevalent disease among the general population worldwide. Not only that, but in recent years, it has progressively been on the rise.¹ Regardless of age or gender, it is generally linked with an etiopathogenic link to a great number of diseases and conditions with high morbidity and mortality, such as diabetes mellitus, high blood pressure, hypercholesterolemia, hypertriglyceridemia, and gout. In other words, we are dealing with a terrible illness, which on the other hand, some authors consider to be an incurable chronic disease.

The truth is that obesity is not a disease, but a syndrome. That is, it does not obey a single cause; on the contrary, there are multiple factors which may condition or cause it. Despite significant advances made in recent years, its true cause remains uncertain.

"I am overweight because I have thyroid dysfunction." This phrase is often repeated at medical consultations, while these very same people complain that "I gain weight even by drinking water", or "All my friends go on diets and I am the only one who has not lost any weight", or "There are those who can eat anything and never gain a pound." Although these phrases are usually attributed to females, this problem often occurs in men as well.

All these phrases highlight the frustration that many overweight people have, who make countless attempts to lose weight, but fail, thus making it a common situation, physicians face in everyday practice, regardless of their specialty; primary physicians, general practitioners, internists, ObGyns, and now pediatricians too.

The real questions are, is there a link between thyroid dysfunction and obesity? And why is the idea that a thyroid dysfunction causes obesity so popular?

This popular belief may very well be a result of the fact that when the thyroid gland is hyperactive, as is the case in hyperthyroidism, the vast majority of people lose weight, and in many cases that weight loss is considerable; hence, it is logical to assume that when the opposite occurs, in other words, if the thyroid gland is hypoactive, as is the case in hypothyroidism, the logical tendency would be to gain weight. This is a good example of the fact that not everything which seems logical is correct.

When we see patients who, for some reason, have undergone total thyroidectomy, for example, as a result of a thyroid cancer, the patient will obviously become completely hypothyroid. In these cases, postoperative weight gain is usually small, and it comes as a result of a certain degree of liquid retention, and not a body mass and adipose tissue increase, which is what should be considered real obesity. And as soon as thyroid hormone supplementation is begun, the excess weight and liquid retention disappear and the patient returns to his/her habitual weight.

On the other hand, hypothyroidism is also a highly prevalent disease among the general population, even though we do not have statistics as complete or as trustworthy as we do on obesity, prevalence reaches up to almost 10% of the general population.² This disease is a result of different

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causes, and it is not in our interest to look further into this matter; let's simply consider hypothyroidism, as a resulting syndrome from the reduction in thyroid hormones in blood, independent from their cause.

In these conditions, understanding that both obesity and hypothyroidism are common entities, it is easy to understand that there will be three possibilities of combinations: people with hypothyroidism and a normal weight, people with obesity and a normal thyroid function, and finally people with obesity and hypothyroidism simultaneously, which, far from being rare, is actually quite common.

But this combination, which is often observed in medical practice, in no way implies an etiopathogenic relationship, but rather a fortuitous one. Therefore, the attempt often made by many physicians to try to help their patients lose weight by administering thyroid hormone is totally inadequate. It is important to understand that losing weight is necessary to maintain health, but the solution is far from being to increase levels of thyroid hormones in the blood, for instance, to artificially produce a hyperthyroid state. In other words, attempting to make the patient sick with hyperthyroidism in order to lose weight and instead of making the patient lose weight to remain healthy.

It is not uncommon to find patients admitted to a hospital emergency room, and even to the intensive care unit, with severe tachycardia and even more severe arrhythmias caused by excessive thyroid hormone intake, sometimes combined with other drugs such as diuretics, which are sometimes used to make the patient believe that a rapid weight reduction has been achieved, when all that is being done is the elimination of a certain amount of fluid. These maneuvers are totally inadequate and dangerous.

It is possible that a slight decrease in weight can be achieved with smaller doses of thyroid hormones, but even in those conditions what the patient usually loses is a

certain amount of lean and non-fat meat that is actually not the real problem.

We will have to wait until the scientific research clarifies the different causes of obesity in order to be able to rationally help our patients with efficiency and without risk. Meanwhile, the basic pillars of treatment will continue to be balanced nutrition and well-managed physical exercise.

Ethical disclosures

Protection of human and animal subjects. The authors declare that no experiments were performed on humans or animals for this study.

Confidentiality of data. The authors declare that they have followed the protocols of their work center on the publication of patient data.

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