Thyroid disorders and Mediterranean diet: which way to prevent metabolic complications

Dear Editor,

Given the severity of the complications of thyroid disorders, discussed in the work of Migneco et al., we questioned if a dietotherapy approach could prevent acute events and chronic conditions. Thyroid-related metabolic disorders are numerous. Often, their exacerbation, as hyperthyroidism, can cause states of organic decompensation up to real medical emergencies. During lifetime, thyroid disorders can cause alterations of the metabolism and an increased risk of cardiovascular disease. For these reasons, a customized dietotherapy, in addition to pharmacological intervention, could preserve the subject. The Mediterranean diet is considered one of the healthiest diets because it reduces mortality of cardiovascular disease. The choice of vegetables must be made considering the presence of thiocyanates and selenium. Thiocyanates are goiter agents, blocking the passage of iodine from the blood to the thyroid, found in brassicaceae, horseradish, onions and nuts. Selenium is a microelement necessary for the function of deiodinase, enzyme that converts thyroxine, inactive form, into active form, triiodothyronine. Therefore, hypothyroid patients should avoid foods with thiocyanates and promote the intake of selenium and iodine. In contrast, in hyperthyroidism a diet therapy should aim to reduce the thyroid activity. Therefore, a Mediterranean diet calibrated for thyroid abnormalities can manage weight, metabolic, and chronic diseases, especially in case of malnutrition due to defect or excess, such as obesity. Ectopic fat is a known phenomenon in liver (hepatosteatosis) or muscle (myosteatosis). Recently, fat infiltration has been found in the thyroid gland. Obesity and unhealthy diet have been identified as causes of ectopic fat, while fatty infiltration has not been clarified in the thyroid yet. In conclusion, a customized diet and the study of mechanisms that leading the ectopic fat deposition can be a key point in preventing and treating any complications arising from thyroid disorders.

Conflict of interest
The authors declare no conflicts of interest.

References


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