Effects of COVID-19 infection on the thyroid gland still present after one year

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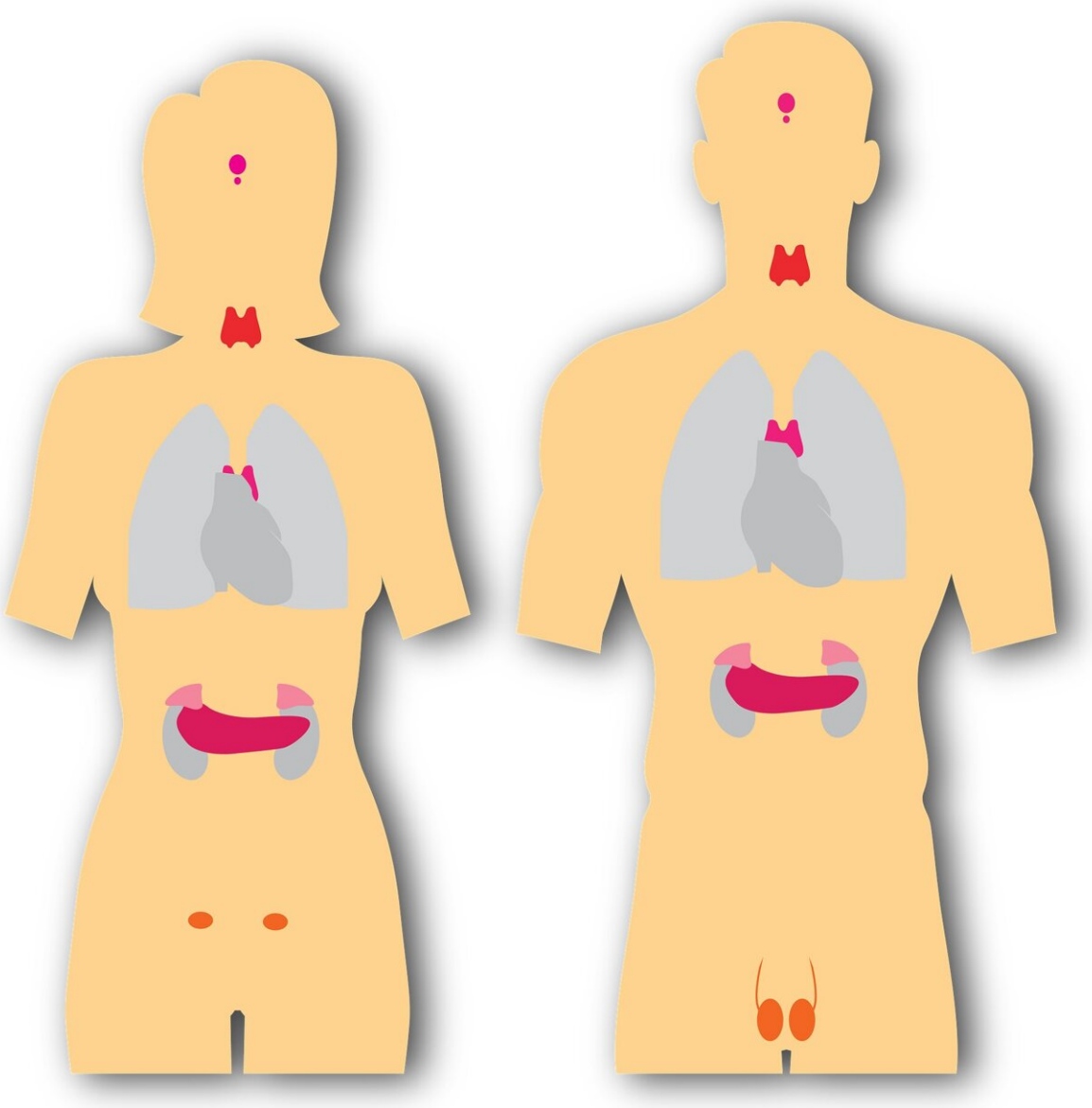

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Severe COVID-19 disease affects thyroid function through a variety of mechanisms according to a new study from Dr. Ilaria Muller and colleagues from the University of Milan, Italy. The study followed patients with thyroid dysfunction correlated to COVID-19 disease for one year, to better characterize such thyroid involvement and to follow its evolution over time. During moderate-to-severe COVID-19 disease the occurrence of thyroiditis (inflammation of the thyroid gland) plays an important role in thyroid dysfunction, in addition to other well-known mechanisms mainly acting on the hypothalamus-pituitary-thyroid axis. The hormone imbalance is usually mild but increases in severe cases of COVID-19. Their study was presented during the 24th European Congress of Endocrinology on May 23 in Milan, Italy.

The thyroid function is crucial to the human body's metabolism, growth, and development. By continuously releasing a stable amount of thyroid hormones into the bloodstream, it aids in the regulation of numerous body functions. The thyroid gland generates extra hormones when the body needs more energy in particular situations, such as when it is growing, cold, or pregnant.

The study looked at more than 100 patients admitted to hospital with severe COVID-19, analyzing their thyroid stimulating hormone (TSH) and other indicators. Thyroiditis occurred frequently in the COVID-19 patient population and the thyroid function, as well as inflammatory indicators, returned to normal in nearly all instances shortly after the end of their COVID-19 illness. However, after 12 months thyroiditis regions remained visible at thyroid ultrasound in half of the individuals, even if reduced in size. The thyroid uptake of technetium or iodine, an indicator of thyroid function, was still reduced in four out of six individuals at

nine months, although it had mostly recovered after 12 months. The long-term clinical consequences, if any, are unknown.

More information: 24th European Congress of Endocrinology

Provided by European Society of Endocrinology