

Animal thyroid extract as effective as T4 in treating hypothyroidism

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Desiccated thyroid extract (DTE), derived from crushed preparations of animal thyroid glands, is a safe and effective alternative to standard T4 therapy in hypothyroid patients, a new study finds. The results will be presented Monday at The Endocrine Society's 95th Annual Meeting in San Francisco.

In adults, untreated hypothyroidism leads to poor mental and physical performance. It also can cause high [blood cholesterol levels](#) that can lead to heart disease. The condition is treated with [Levothyroxine](#), a synthetic (laboratory-made) form of T4 that is identical to the T4 the thyroid naturally makes. Before the advent of synthetic [thyroxine](#), patients with hypothyroidism were treated with DTE, which contains both T4 and the active [thyroid hormone](#) T3. Many patients claim they do not feel as well on T4 alone without the additional T3 hormone.

"While thyroid experts recommend T4 alone for treatment of hypothyroidism, until now there have not been any randomized double-blind studies to compare the [clinical effectiveness](#) of synthetic T4 with DTE," said Thanh Hoang, of the Naval Medical Center in Portsmouth, Virginia. "We found that DTE is a safe and effective alternative to the standard T4 therapy. Furthermore, DTE caused modest weight loss compared to T4 alone."

In this study, researchers investigated the effectiveness of DTE compared to Levothyroxine (L-T4) in 70 hypothyroid patients. Patients were randomized to either DTE or L-T4 for 16 weeks and then crossed-over for the same duration. Study subjects underwent biochemical and neurocognitive tests along with measurements of symptoms and mental health at baseline and at the end of each treatment period.

DTE therapy did not result in a significant improvement in quality of life, but did cause modest weight loss and nearly half of the study

patients expressed preference for DTE over L-T4.

"Providers may now have an additional option for the treatment of hypothyroidism in patients who are not satisfied with standard T4 therapy," said Hoang. "DTE could be considered for hypothyroid patients who still have symptoms despite normal thyroid blood tests while on T4 therapy."

Provided by The Endocrine Society

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