

Clinical Studies in Thyroidology

Dominique Luton

Department of Nuclear Medicine, Necker Hospital, Paris, France.

Abstract

Background & Aim: Clinical studies in thyroidology reported outstanding results. Specifically, intriguing questions on thyroid dysfunction and thyroid cancer were answered through well-designed, randomized clinical trials. This review summarizes the important research published in 2020.

Original, peer-reviewed research articles published between January 2020 and December 2020 were extracted through an independent literature review. A quick summary of those articles is presented along side their clinical utility or implications. The publications of interest discussed below addressed the subsequent topics: thyroid dysfunction, risk of thyroid cancer, molecular diagnostics and new therapeutics for thyroid cancer, and thyroid disease within the coronavirus disease 2019 (COVID-19) pandemic era.

Thyroid hormone is related to low birth weight; however, the impact of subclinical hypothyroidism has remained unclear. A recent systematic review and individual-participant data meta-analysis of 48,145 mother-child pairs from 36 cohorts provided evidence that maternal subclinical hypothyroidism during pregnancy was related to a better risk of small for fetal age and lower birthweight, while isolated hypothyroxinemia (n=929) was related to a lower risk of SGA and better birthweight. There was an inverse, dose-response association of maternal TSH and free thyroxine with birthweight, suggesting the rationale of thyroid function screening during the prenatal period for better postpartum outcomes.

Thyroid cancers of all sizes increased between 1988 and 2005 in both men and ladies. Exposure to radiation is that the best-established environmental risk factor for thyroid cancer. Nonionizing radiation from cell phones has also been implicated.

A direct correlation between all-cancer incidence rates and latitude and an inverse correlation between all-cancer incidence rates and temperature are reported. Within the present study, we examined the connection between thyroid cancer incidence and average temperature in 50 U.S. states. The age-adjusted incidence of thyroid cancer is from U.S.

The American Thyroid Association (ATA) develops Clinical Practice Guidelines to supply guidance and proposals for particular practice areas concerning thyroid disease, including thyroid cancer. The rules aren't inclusive of all proper approaches or methods, or exclusive of others. The rules don't establish a typical of care, and specific outcomes aren't guaranteed. Treatment decisions must be made supported the independent judgment of health care providers and every patient's individual circumstances. A suggestion isn't intended to require the place of physician judgment in diagnosing and treatment of particular patients. It's also not intended to function a basis to approve or deny financial coverage for any specific therapeutic or diagnostic modality. The ATA develops guidelines supported the evidence available within the literature and therefore the expert opinion of the task force within the recent timeframe of the publication of the rules. Management issues haven't been and can't be comprehensively addressed in randomized trials; therefore, the evidence can't be comprehensive. Guidelines cannot always account for individual variation among patients. Guidelines can't be considered inclusive of all proper methods of care or exclusive of other treatments reasonably directed at obtaining an equivalent results. Therefore, the ATA considers adherence to the present guideline to be voluntary, with the last word determination regarding its application to be made by the treating physician and health care professionals with the complete consideration of the individual patient's clinical history and physical status.

hypothyroidism-in-adults-cosponsored-by-the-american-association-of-clinical-endocrinologists-and-the-american-thyroid-association.