



Thyroid Function in Later Life

Last reviewed January 2020

Geriatric Thyroidology: An Update

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3401753/>

This overview article introduces age-related changes that impact thyroid function. Hyperthyroidism, hypothyroidism, subclinical and thyroid nodules are discussed. (OPEN ACCESS)

Thyroid Disease in the Older Patient

https://link.springer.com/referenceworkentry/10.1007%2F978-3-319-32700-6_47-1

This review provides an overview of thyroid disease in the elderly, prevalence and the clinical management. (PAID ACCESS)

Thyroid and Aging or the Aging Thyroid? An Evidence-Based Analysis of the Literature

<https://www.hindawi.com/journals/jtr/2013/481287/>

This review discussed the evidence-based literature on thyroid function in the elderly and whether subclinical thyroid dysfunction in the elderly should be treated. (OPEN ACCESS)

A Prospective Study of Thyroid Dysfunction in Elderly Patients and its Clinical Correlation

<http://www.archivesofmedicine.com/medicine/a-prospective-study-of-thyroid--dysfunction-in-elderly-patients-and-its-clinical-correlation.pdf>

The study discussed was undertaken to study the spectrum of thyroid dysfunction in elderly and to correlate clinical symptoms with abnormal thyroid function. (OPEN ACCESS)

Clinical Aspects of Thyroid Function During Ageing

[www.thelancet.com/journals/landia/article/PIIS2213-8587\(18\)30028-7/fulltext](http://www.thelancet.com/journals/landia/article/PIIS2213-8587(18)30028-7/fulltext)

The authors describe the physiological changes in thyroid function that occur with increasing age. They also discuss treatment considerations for clinical and subclinical thyroid dysfunction according to international guidelines for older people and the relationship between variations in thyroid function and common diseases of old age including cardiovascular disease, osteoporosis, cognitive impairment and frailty. (PAID ACCESS)

Prevalence and Risk Factors of Thyroid Dysfunction in Older Adults in the Community

<https://www.nature.com/articles/s41598-019-49540-z>

The objectives of the study described were to investigate the prevalence of thyroid dysfunction in an older community-based US population to better understand demographic and clinical factors for thyroid dysfunction in this age group, as well as to examine the relationship between serum concentrations of T3, FT4, anti-TPO and TSH with demographic and clinical risk factors. (OPEN ACCESS)

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Stability of Thyroid Function in Older Adults: The Birmingham Elderly Thyroid Study

<https://bjgp.org/content/68/675/e718>

The aim of this longitudinal follow-up study was to establish the stability of thyroid function over time, and identify predictors of development of overt thyroid dysfunction. (OPEN ACCESS)

Approach to Geriatric Patients with Subclinical Thyroid Disorders

<https://link.springer.com/content/pdf/10.1007%2Fs12020-014-0339-2.pdf>

In this article the authors evaluated the prevalence of thyroid dysfunction in elderly subjects attending an outpatient clinic and assessed whether subclinical hypothyroidism affected functional status. (OPEN ACCESS)

Overt and Subclinical Hypothyroidism in the Elderly: When to Treat?

<https://www.frontiersin.org/articles/10.3389/fendo.2019.00177/full>

The objective of this review was to summarize the recommendations for a correct diagnostic workup and therapeutic approach to older people with elevated TSH value, with special attention to the presence of frailty, comorbidities, and poly-therapy. (OPEN ACCESS)

Thyroid Hormone Therapy for Older Adults with Subclinical Hypothyroidism

<https://www.nejm.org/doi/full/10.1056/NEJMoa1603825>

The authors sought to determine whether levothyroxine provided clinical benefits for older persons with subclinical hypothyroidism. (OPEN ACCESS)

Subclinical Thyroid Disease and Mortality in the Elderly: A Retrospective Cohort Study

[https://www.amjmed.com/article/S0002-9343\(15\)30026-7/pdf](https://www.amjmed.com/article/S0002-9343(15)30026-7/pdf)

The study described sought to evaluate the association between subclinical hypothyroidism and subclinical hyperthyroidism and mortality in the elderly and to define the thyroid-stimulating hormone values associated with excess mortality in the elderly. (OPEN ACCESS)

Subclinical Thyroid Dysfunction and Frailty Among Older Men

<https://academic.oup.com/jcem/article/100/12/4524/2536345>

The purpose of the study discussed was to assess the cross-sectional and prospective associations between subclinical thyroid dysfunction and frailty and the 5 frailty subdomains (sarcopenia, weakness, slowness, exhaustion, and low activity). (OPEN ACCESS)

Subclinical Thyroid Dysfunction and Functional Capacity Among Elderly

<https://www.liebertpub.com/doi/10.1089/thy.2013.0071>

This article discusses a study which assessed the association between subclinical thyroid dysfunction and functional capacity in an elderly population. (OPEN ACCESS)

Hypothyroidism in the Elderly: Diagnosis and Management

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3340110/>

This selective review includes data on thyroid disease in the elderly. Epidemiology, diagnosis and treatment are discussed. (OPEN ACCESS)

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Hypothyroidism in the Older Population

<https://thyroidresearchjournal.biomedcentral.com/articles/10.1186/s13044-019-0063-3>

This article reviews the current literature on hypothyroidism focusing on older adults. An assessment of the risks and benefits of contemporary management on outcomes in older adults is included. (OPEN ACCESS)

Hypothyroidism in the Elderly: Who Should be Treated and How?

<https://academic.oup.com/jes/article/3/1/146/5185175>

In this review, the authors evaluated the state of the art on hypothyroidism in the elderly with a special focus on the effect of subclinical hypothyroidism on cognition and the cardiovascular system function. They also summarize the recommendations for a correct diagnostic workup and therapeutic approach to older people with an elevated thyroid stimulating hormone value, with special attention to the presence of frailty, comorbidities, and poly therapy. (OPEN ACCESS)

Older Patients' Experience of Primary Hypothyroidism: A Qualitative Study

<https://onlinelibrary.wiley.com/doi/full/10.1111/hex.12656>

The authors explored the experience of hypothyroidism in older people and examined how this might influence their understanding and acceptance of diagnosis, treatment with Levothyroxine and the monitoring process. (OPEN ACCESS)

Thyroid Function Changes in the Elderly and Their Relationship to Cardiovascular Health: A Mini-Review

<https://www.karger.com/Article/Fulltext/490911>

This review sought to summarize the most recent large population studies investigating thyroid changes with aging and interpreting their effects on cardiovascular health in the elderly. (OPEN ACCESS)

Hyperthyroidism in Aging

<https://www.ncbi.nlm.nih.gov/books/NBK278986/>

The author discusses the prevalence of hyperthyroidism in aging, symptoms and signs, diagnosis, causes and treatment. (OPEN ACCESS)

Atrial Fibrillation and Hyperthyroidism: A Literature Review

<https://www.sciencedirect.com/science/article/pii/S0019483217302626>

This review aims to answer questions regarding the relationship between atrial fibrillation and hyperthyroidism. (OPEN ACCESS)

Thyroid Hormones as Predictors of Short- and Long-term Mortality in Very Old Hospitalized Patients

<https://academic.oup.com/biomedgerontology/article/68/9/1122/596138>

The authors investigated the relationship between thyroid hormones and mortality during hospitalization and in a prolonged follow-up in frail older patients. (OPEN ACCESS)

The Effect of Long-Term Thyroid-Stimulating Hormone Suppressive Therapy on the Cognitive Function of Elderly Patients with Differentiated Thyroid Carcinoma

<https://academic.oup.com/jcem/article/99/10/3782/2836494>

The authors conducted a cross-sectional case-control study investigating the effect of long-term thyroid stimulating hormone (TSH) suppression on the cognitive function of elderly patients with differentiated thyroid carcinoma (DTC). (OPEN ACCESS)

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Serum Thyroid-Stimulating Hormone and Cognition in Older People

<https://academic.oup.com/ageing/article/45/1/155/2195307>

The aim of this study was to investigate if high TSH concentrations and cognitive decline are linked in older adults. (OPEN ACCESS)

The Relationship Between Thyroid Function and Cerebral Blood Flow in Mild Cognitive Impairment and Alzheimer's Disease

<https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0214676>

This study investigated the relationship between thyroid function and cerebral blood flow in patients with mild cognitive impairment and Alzheimer's disease. (OPEN ACCESS)

Thyroid Function, the Risk of Dementia and Neuropathologic Changes: The Honolulu-Asia Aging Study

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3147246/>

This article sought to determine whether thyroid function is associated with dementia, specifically Alzheimer's disease. (OPEN ACCESS)

Association Between Thyroid Dysfunction and Incident Dementia in the Atherosclerosis Risk in Communities Neurocognitive Study

<https://www.jofem.org/index.php/jofem/article/view/588/284284377>

The authors examined associations of thyroid dysfunction or possible autoimmune thyroid disease with dementia in the Atherosclerosis Risk in Communities (ARIC) Neurocognitive Study. (OPEN ACCESS)

Prevalence and Determinants of Thyroid Disorders in Elderly Patients with Affective Disorders: Lithium and Nonlithium Patients

[https://www.ajgponline.org/article/S1064-7481\(12\)60205-X/abstract](https://www.ajgponline.org/article/S1064-7481(12)60205-X/abstract)

The objective of this study was to determine the prevalence and determinants of thyroid dysfunction in older patients with affective disorders divided into lithium and nonlithium patients. (PAID ACCESS)

Levothyroxine Dose and Risk of Fractures in Older Adults: Nested Case-Control Study

<https://www.bmj.com/content/342/bmj.d2238>

This paper discusses the findings of a study which found that among older adults, 70 years and over, levothyroxine treatment was associated with a significant increase risk for fracture. (OPEN ACCESS)

Aggressive Differentiated Thyroid Cancer in the Geriatric Patient

<https://journals.sagepub.com/doi/pdf/10.1177/014556131709600619>

This article takes a case study approach to discuss the management of thyroid cancer in older adults. (OPEN ACCESS)