INPLASY

The risk of thyroid disease in lichen sclerosus patients: A systematic review and meta-analysis

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ADMINISTRATIVE INFORMATION

Support - None.

Review Stage at time of this submission - Piloting of the study selection process.

Conflicts of interest - None declared.

INPLASY registration number: INPLASY202480040

Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 01 August 2024 and was last updated on 01 August 2024.

INTRODUCTION

Review question / Objective This study aims to investigate the association between thyroid diseases and lichen sclerosus.

Rationale Lichen sclerosus is a chronic inflammatory skin disease that can be found in both sexes. Moreover, this disease has thyroid comorbidities including hypothyroidism, hyperthyroidism, and autoimmune disorders.
This study aims to investigate the association between thyroid diseases and lichen sclerosus.

Condition being studied Lichen sclerosus, thyroid disease.

METHODS

Search strategy Four researchers will independently systematic search using 2 databases, including MEDLINE and EMBASE to find the eligibility articles from initiation to April 2024.

Participant or population Patients with lichen sclerosus who explicated thyroid disease.

Intervention Patients with lichen sclerosus.

Comparator Patients without lichen sclerosus.

Study designs to be included The types of studies are case-control, prospective or retrospective cohort, or cross-sectional studies.

Eligibility criteria We will include the types of study as case-control, prospective or retrospective cohort, or cross-sectional studies. The participants are patients with lichen sclerosus. The primary outcomes of interest are thyroid diseases including hypothyroidism, hyperthyroidism, and autoimmune thyroid disease.

Information sources MEDLINE and EMBASE.

Main outcome(s) The association between thyroid diseases and lichen sclerosus patients.

Additional outcome(s) None.

Data management We will independently perform the screening of titles and abstracts from included articles through Covidence, then the full-text screening will be done from the selected articles. The data extraction will be independently done from the eligibility articles from the full-text screening. Any discordance will be resolved through discussion.

Quality assessment / Risk of bias analysis The Newcastle-Ottawa Scale (NOS) will be used for the quality assessment of the eligibility articles.

Strategy of data synthesis We will use the random effect model. The statistical heterogeneity of this systematic review and meta-analysis will be assessed by I2 statistics and the Cochran's Q test.

Subgroup analysis Not performed. However, we will meta-regress patient demographic data against the pooled outcomes if the meta-analysis shows high heterogeneity.

Sensitivity analysis Not performed.

Language restriction English.

Country(ies) involved Thailand.

Keywords Lichen sclerosus; thyroid disease.

Contributions of each author
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