

INPLASY PROTOCOL

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None declared.

Evidence summary and critical appraisal of studies on the effectiveness and safety of non-conventional treatments for male androgenetic alopecia: a protocol for a systematic review

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Review question / Objective: The objective of the proposed systematic review is to summarize and critically appraise the existing evidence regarding the effectiveness and safety of non-conventional treatments for male pattern baldness.

Condition being studied: Male pattern baldness—which is also referred to as male androgenetic alopecia.

Eligibility criteria: Studies, of any design, which investigated the impact of complementary and alternative medicine for male androgenetic alopecia. Evidence in non-English language will be excluded. There will be no date restrictions.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 09 July 2021 and was last updated on 09 July 2021 (registration number INPLASY202170027).

INTRODUCTION

Review question / Objective: The objective of the proposed systematic review is to summarize and critically appraise the existing evidence regarding the effectiveness and safety of non-conventional treatments for male pattern baldness.

Rationale: Non-conventional therapies such as complementary and alternative medicine (CAM) are used by patients diagnosed with conditions that are pathological (e.g., cancer) and benign (e.g., alopecia). Pattern baldness is the most common form of hair loss, and many men are diagnosed with it; this condition is also referred to as androgenetic alopecia (AGA).

The evidence base informs clinical practice. While dermatologists know about their patients' use of CAM, they may not be cognizant of the evidence base thereof. Therefore, a summarized and critically appraised body of evidence could help clinicians and patients make more informed decisions.

Condition being studied: Male pattern baldness—which is also referred to as male androgenetic alopecia.

METHODS

Search strategy: Information will be obtained from the peer-reviewed and grey literature; we will gather knowledge from dissertations and journal articles; trial registries will also be searched.

Participant or population: The patient population of interest is men diagnosed with androgenetic alopecia; they can be of any ethnicity/race and age.

Intervention: Complementary and alternative medicines for androgenetic alopecia.

Comparator: Controls can include inert substances (i.e., vehicle or placebo), other CAMs, or conventional non-surgical monotherapy with drugs indicated for treatment of androgenetic alopecia e.g., minoxidil and the 5-alpha reductase inhibitors (i.e., dutasteride and finasteride).

Study designs to be included: Information will be gathered from both randomized and observational studies.

Eligibility criteria: Studies, of any design, which investigated the impact of complementary and alternative medicine for male androgenetic alopecia. Evidence in non-English language will be excluded. There will be no date restrictions.

Information sources: Data sources will include PubMed, Scopus, EMBASE (Ovid), Web of Science, and ProQuest Dissertations & Theses Global. We will also

search clinical trial registries (e.g. ClinicalTrials.gov).

Main outcome(s): Our primary endpoint would include measures of hair restoration at clinically relevant time points such as: change in terminal hair density after 24 weeks of therapy.

Data management: Information regarding efficacy/effectiveness, safety, evidence quality and statistical evidence will be extracted; the data will be organized in spreadsheets and tables. Findings from our knowledge syntheses will be presented in a manner deemed intuitive.

Quality assessment / Risk of bias analysis: The tools used for assessing evidence quality will depend on the study design; for example, Cochrane's risk of bias tool will be used for randomized trials, while the Newcastle-Ottawa scale could be used for some types of observational studies.

Strategy of data synthesis: The gathered evidence will determine the strategy for data synthesis.

Subgroup analysis: None.

Sensitivity analysis: None.

Country(ies) involved: Canada.

Keywords: alopecia; critical appraisal; evidence base; alternative medicine; complementary therapy.

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