INPLASY PROTOCOL

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Monotherapy with platelet-rich plasma for male and female pattern baldness: protocol for a systematic review

Gupta, AK[1]; Talukder, M[2]; Bamimore, MA[3].

Review question / Objective: To gather evidence on the effect of monotherapy with platelet-rich plasma for androgenetic alopecia in men and women.
Condition being studied: Pattern baldness, also referred to as androgenetic alopecia.
Eligibility criteria: Randomized and observational studies that investigated the impact of monotherapy with platelet-rich plasma on male and female pattern baldness. Only evidence in English will be included; there will be no date restrictions.

INTRODUCTION

Review question / Objective: To gather evidence on the effect of monotherapy with platelet-rich plasma for androgenetic alopecia in men and women.

Rationale: Globally, millions are diagnosed with androgenetic alopecia—which is also known as 'pattern baldness'. Though clinically benign, persons with this condition seek therapy as hair loss is associated with negative psychosocial consequences. Topical minoxidil (5 and 2 per cent) and oral finasteride (1 mg/day) are long-standing drugs for pattern baldness; however, platelet-rich plasma is a more recent therapy. Evidence synthesis of the platelet-rich plasma literature—insofar as male and female pattern baldness—would be useful to clinicians, patients and researchers.

Condition being studied: Pattern baldness, also referred to as androgenetic alopecia.

METHODS

Search strategy: PubMed 262 (("baldness"[Title/Abstract] OR "hair loss"[Title/Abstract] OR "alopecia"[Title/Abstract]) OR (alopecia[MeSH Terms])) AND (("platelet"[Title/Abstract] AND "rich"[Title/Abstract] AND "plasma"[Title/Abstract]) OR (platelet rich plasma[MeSH Terms])); Web of Science 290 (TS=("platelet" AND "rich" AND "plasma")) AND TS=("hair loss" OR "alopecia" OR bald*); EMBASE (Ovid) 389 Embase Classic+Embase 1 ("hair loss" or "alopecia" or bald*).ab.; 2 exp alopecia/ ; 3 1 or 2; 4 exp thrombocyte rich plasma/ ; 5 ("platelet" and "rich" and "plasma").ab. ; 6 4 or 5 ; 7 3 and 6 ; Scopus 204 (ABS ("hair loss" OR "alopecia" OR bald*) AND ABS ("platelet" AND "rich" AND "plasma")); CINAHL 65 # Query Results S7 S4 AND S6 65; S6 S1 OR S5 2,740; S5 (MH "Platelet-Rich Plasma+") 1,834; S4 S2 OR S3 4,775; S3 AB "alopecia" OR "hair loss" OR bald* 2,948 ; S2 (MH "Alopecia+") 2,989; S1 AB "platelet" AND "rich" AND "plasma" 1,978.

Participant or population: Subjects diagnosed with androgenetic alopecia; participants of all ages and races/ethnicities are included.

Intervention: Monotherapy with Platelet-rich plasma.

Comparator: Comparators can include: (1) no treatment (i.e., nothing), (2) other monotherapies, and (3) placebo.

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

Eligibility criteria: Randomized and observational studies that investigated the impact of monotherapy with platelet-rich plasma on male and female pattern baldness. Only evidence in English will be included; there will be no date restrictions.

Information sources: Searches were conducted in CINAHL, EMBASE (Ovid), PubMed, Scopus, and Web of Science.

Main outcome(s): The outcome(s) will be consolidated according to the evidence we gather.

Additional outcome(s): None.

Data management: Data will be organized into spreadsheets.

Quality assessment / Risk of bias analysis: Quality of evidence within studies will be assessed using Cochrane Collaboration's risk of bias (RoB) tool; evidence quality across studies will be evaluated using the Grading of Recommendations, Assessment, Development and Evaluations (GRADE) framework.

Strategy of data synthesis: The evidence we gather will guide all quantitative analyses; if there is sufficient data, meta-analyses will be conducted.

Subgroup analysis: If there is sufficient data, clinically meaningful subgroup analyses will be done.

Sensitivity analysis: None.

Language: Only evidence in English language will be included.

Country(ies) involved: Canada.

Keywords: platelet-rich plasma; pattern baldness; hair loss; alopecia.

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