INTRODUCTION

Review question / Objective: To systematically evaluate the effects of medical grade honey on cesarean wound healing.

Condition being studied: Medical grade honey, cesarean, wound healing, protocol, systematic review, meta-analysis.
METHODS

Participant or population: Participants who have undergone cesarean will be included.

Intervention: In the treatment group, patients were given medical grade honey.

Comparator: In the control group, patients were given conventional treatments, placebo therapy, or no treatment.

Study designs to be included: All RCTs of medical grade honey for cesarean wound healing will be included. Case reports, animal experiments, reviews and republished studies will be excluded.

Eligibility criteria: RCTs of medical grade honey for cesarean wound healing.

Information sources: PubMed, Embase, Cochrane Library, Web of Science, China National Knowledge Infrastructure, China Science and Technology Journal Database, and Chinese Biomedical Literature Database will be searched from inception of databases to December 2020. Additional trials will be searched by reviewing the reference lists of the retrieved articles, conference proceedings, and gray literature. The detailed search strategy for PubMed is shown in Table 1. The similar search strategies will be used for other electronic databases.

Main outcome(s): Healing rate and healing time will be designated as the primary outcomes.

Additional outcome(s): Patient satisfaction and side effects will be designated as the secondary outcome.

Quality assessment / Risk of bias analysis: Two reviewers will independently assess the risk of bias of included studies by Cochrane risk of bias assessment tool. Random sequence generation, allocation concealment, blinding of participants and personnel, blinding of outcome assessment, incomplete outcome data, selective reporting and other bias will be evaluated. Any disagreement will be resolved by the third reviewer.

Strategy of data synthesis: If the number of included studies for the primary outcomes is less than 5, only qualitative description will be carried. Data synthesis will be performed using Review Manager 5.3 (The Cochrane Collaboration, Oxford, UK). Odds ratio will be used for dichotomous outcomes with 95% confidence interval. Mean difference or standardized mean difference will be used for continuous outcomes. I2 test will be used to identify heterogeneity. The I2 value > 50% means significant heterogeneity, and the random effects model will be used. The fixed effects model will be utilized if I2 value ≤ 50%.

Subgroup analysis: Subgroup analysis will be performed to explore the possible causes of heterogeneity based on the difference in participant characteristics, interventions, controls, and outcome indicators. If significant heterogeneity still exists after subgroup analysis, meta-analysis will not be pooled, and qualitative description will be reported.

Sensibility analysis: Sensitivity analysis will be conducted to test the robustness and reliability of pooled results by excluding combined studies one by one to observe whether there is significant change in the comprehensive results.

Country(ies) involved: China.

Keywords: medical grade honey, cesarean, wound healing, protocol, systematic review, meta-analysis.

Contributions of each author:
Author 1 - Yanran Tian.
Author 2 - Wenwu Gui.
Author 3 - Zeyu Zheng.
Author 4 - Qiang Feng.