

Polyethylene glycol compared to lactulose for constipation in pregnancy: a meta-analysis

INPLASY202480023  
doi: 10.37766/inplasy2024.8.0023  
Received: 05 August 2024  
Published: 05 August 2024

Chen, LJ; Huang, JQ; Song, ZJ; Zhao, Y; Sun, J; Miao, GB; Meng, C; Liu, P.

**Corresponding author:**  
Chang Meng

15931865117@163.com

**Author Affiliation:**  
Emergency General Hospital.

ADMINISTRATIVE INFORMATION

**Support** - None.  
**Review Stage at time of this submission** - Data analysis.  
**Conflicts of interest** - None declared.  
**INPLASY registration number:** INPLASY202480023

**Amendments** - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 05 August 2024 and was last updated on 16 August 2025.

INTRODUCTION

**Review question / Objective** We performed a meta-analysis to compare the efficacy and adverse effects of Polyethylene glycol(PEG) and lactulose in the treatment of constipation during pregnancy.

**Condition being studied** BSFS score, Wexner score, and adverse reactions such as abdominal pain/bloating, vomiting, and diarrhea.

METHODS

**Participant or population** Woman during pregnancy; Patients with functional constipation meet Rome IV diagnostic criteria.

**Intervention** Patients were treated with PEG.

**Comparator** Patients were treated with lactulose.

**Study designs to be included** The search strategy was RCTs.

**Eligibility criteria** (1) Woman during pregnancy; (2) Patients with functional constipation meet Rome IV diagnostic criteria. (3) The study population was excluded from complications with severe organ function, inflammatory bowel disease, and intestinal obstruction. (4)Patients were treated with PEG or lactulose.

**Information sources** A comprehensive manual search of the PubMed, Embase and Cochrane databases was conducted in order to select relevant randomised controlled trials. Should the necessity arise to obtain pertinent research data, the authors will be duly contacted.

**Main outcome(s)** BSFS score, Wexner score, and adverse reactions such as abdominal pain/bloating, vomiting, and diarrhea.

**Quality assessment / Risk of bias analysis** We evaluated the methodological quality of the individual studies using the Cochrane risk of bias tool for RCTs.

---

**Strategy of data synthesis** The estimates are expressed as odds ratio (OR) or mean difference (MD) with a 95% confidence interval (CI).

**Subgroup analysis** None.

**Sensitivity analysis** We conducted sensitivity analyses to investigate the influence of a single study on the overall pooled estimate of each predefined outcome.

**Language restriction** None.

**Country(ies) involved** China.

**Keywords** polyethylene glycol; lactulose; constipation; pregnancy.

**Contributions of each author**

Author 1 - Lijuan Chen.

Author 2 - Jiaqi Huang.

Author 3 - Zejun Song.

Author 4 - Yue Zhao.

Author 5 - Jing Sun.

Author 6 - Guobin Miao.

Author 7 - Chang Meng.

Email: 15931865117@163.com

Author 8 - Peng Liu.