

INPLASY PROTOCOL

To cite: Feng et al. a systematic review and meta-analysis of medical treatment in patients with Ovarian Cancer. Inplasy protocol 2020120113. doi: 10.37766/inplasy2020.12.0113

Received: 22 December 2020

Published: 23 December 2020

Corresponding author:
Yewen Feng

standglass@vip.qq.com

Author Affiliation:
Chengdu University of
Traditional Chinese Medicine

Support: The National Natural
Science.

**Review Stage at time of this
submission:** the National
Natural Science.

Conflicts of interest:
None.

A systematic review and meta-analysis of medical treatment in patients with Ovarian Cancer

Feng, Y¹; Zhao, Y²; Li, Z³; Yu, C⁴.

Review question / Objective: The findings of this meta-analysis will provide evidence to judge whether Lichong decoction combine with Carboplatin is a more effective intervention compare to Carboplatin only for patient of Ovarian Cancer.

Condition being studied: Ovarian cancer is a common malignant tumor of the female reproductive system. The onset of the disease is insidious and there is no effective early screening method. Many patients are already in the advanced stage when they are diagnosed, so the mortality rate is high. Epidemiological survey data show that ovarian cancer is the fifth cause of cancer death, and the fatality rate is the first of all gynecological malignancies. At present, the main way to treat ovarian cancer is surgery, but the postoperative recurrence rate is high. In addition, chemotherapy is also an effective way to treat advanced ovarian cancer. However, chemotherapy has great damage to the liver and kidney, and can also cause bone marrow suppression and gastrointestinal symptoms. Therefore, it is urgent to find new methods to assist the treatment of ovarian cancer. Traditional Chinese medicine has a treatment history of thousands of years. During this process, several effective prescriptions for the treatment of ovarian cancer have been summarized. Lichong decoction is one of the representative prescriptions.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 23 December 2020 and was last updated on 23 December 2020 (registration number INPLASY2020120113).

INTRODUCTION

Review question / Objective: The findings of this meta-analysis will provide evidence to judge whether Lichong decoction

combine with Carboplatin is a more effective intervention compare to Carboplatin only for patient of Ovarian Cancer.

Condition being studied: Ovarian cancer is a common malignant tumor of the female reproductive system. The onset of the disease is insidious and there is no effective early screening method. Many patients are already in the advanced stage when they are diagnosed, so the mortality rate is high. Epidemiological survey data show that ovarian cancer is the fifth cause of cancer death, and the fatality rate is the first of all gynecological malignancies. At present, the main way to treat ovarian cancer is surgery, but the postoperative recurrence rate is high. In addition, chemotherapy is also an effective way to treat advanced ovarian cancer. However, chemotherapy has great damage to the liver and kidney, and can also cause bone marrow suppression and gastrointestinal symptoms. Therefore, it is urgent to find new methods to assist the treatment of ovarian cancer. Traditional Chinese medicine has a treatment history of thousands of years. During this process, several effective prescriptions for the treatment of ovarian cancer have been summarized. Lichong decoction is one of the representative prescriptions.

METHODS

Search strategy: We will search the following databases from their inception onwards to the 1 December 2020: PubMed, Embase, the Cochrane Library, China National Knowledge Infrastructure, the Chongqing VIP Chinese Science and Technology Periodical Database, Wanfang Database, and China Biomedical Literature Database. We will also manually search the Chinese Clinical Trial Register, conference papers, and unpublished studies or references. The search strategy for PubMed is (Ovarian Neoplasms OR Neoplasm, Ovarian OR Ovarian Neoplasm OR Ovary Neoplasms OR Neoplasm, Ovary OR Neoplasms, Ovary OR Ovary Neoplasm OR Neoplasms, Ovarian OR Ovary Cancer OR Cancer, Ovary OR Cancers, Ovary OR Ovary Cancers OR Ovarian Cancer OR Cancer, Ovarian OR Cancers, Ovarian OR Ovarian Cancers OR Cancer of Ovary OR Cancer of the Ovary) And (Carboplatin OR cis-Diammine (cyclobutanedicarboxylato)

platinum II OR CBDCA OR Paraplatin OR Paraplatine OR Platinwas OR Ribocarbo OR Carboplat OR Neocarbo OR Carbosin OR Carbotec OR Ercar OR JM-8 OR JM 8 OR JM8 OR Nealorin OR NSC-241240 OR NSC 241240 OR NSC241240 OR Blastocarb) AND (Lichong Decoction), the retrieval strategy varies according to the different databases.

Participant or population: We will include all patients who are clinically diagnosed with ovarian cancer, regardless of their gender, age, race, economic status, or education level.

Intervention: The experimental group was treated with Lichong decoction combined with carboplatin.

Comparator: The control group was treated with carboplatin alone.

Study designs to be included: Randomized controlled trials (RCTs) will be included.

Eligibility criteria: Randomized controlled trials (RCTs) will be included for systematic review and meta-analysis without limitations on publication type.

Information sources: PubMed, Embase, the Cochrane Library, China National Knowledge Infrastructure, the Chongqing VIP Chinese Science and Technology Periodical Database, Wanfang Database, and China Biomedical Literature Database. We will also manually search the Chinese Clinical Trial Register, conference papers, and unpublished studies or references.

Main outcome(s): The primary outcomes of this meta-analysis will focus on clinical effectiveness. (1) Disease control rate (determined as complete remission, partial remission, and stable according to the World Health Organization solid tumor efficacy evaluation criteria).

Additional outcome(s): (q) Quality of life improvement rate (KPS score before and after treatment increased by ≥ 10 points); (2) Adverse reactions (nausea and vomiting,

leukopenia, abnormal liver function, hair loss, etc.).

Data management: Two researchers used standardized forms to extract data. The data to be extracted will include the title, author, year of publication, gender, average age, total number of cases, intervention measures, results, and any other relevant information.

Quality assessment / Risk of bias analysis: For randomized controlled trials, the evaluation criteria recommended in Cochrane Handbook 5.1.0 were used for quality evaluation. There are 7 items in total. If they are fully satisfied, they are classified as A-level documents; partially satisfied are classified as B-level documents; if not satisfied, they are classified as C-level documents. For the cohort study, the Newcastle-Ottawa Scale was used to evaluate the quality, including the selection of the study population, the comparability between groups and the outcome measurement, with a total of 8 items. Among them, the study population selected 4 points, the inter-group comparability was 2 points, and the result measurement was 3 points, for a total of 9 points. The total score of 0 to 3 is divided into C-level documents, 4 to 6 are divided into B-level documents, and 7-9 are divided into A-level documents. After the two researchers completed the evaluation independently, they discussed the evaluation results and reached a consensus. If there are differences, consult the third researcher.

Strategy of data synthesis: This meta-analysis will use RevMan 5.3.5 software. According to the level of heterogeneity of the research, choose a fixed effects model or a random effects model. We will conduct a meta-analysis of at least 3 eligibility criteria. If only 1 or 2 studies met the inclusion criteria, a descriptive analysis was used. If there are more than 10 articles, a funnel chart is used to analyze publication bias.

Subgroup analysis: Subgroup analysis: Subgroup analysis will be handled

according to the differences in patient conditions, and control.

Sensibility analysis: Sensitivity analyses will be performed to verify the robustness of the review conclusions. The impacts of study design, methodological quality, and missing data will be evaluated. Sensitivity analyses were planned by studies considered being at low risk of bias.

Country(ies) involved: China.

Keywords: Ovarian Neoplasms; Carboplatin; Lichong Decoction; meta-analysis.

Contributions of each author:

Author 1 - Yewen Feng - The author drafted the manuscript.

Author 2 - Yumin Zhao - The author provided statistical expertise.

Author 3 - Li Zhang - The author contributed to the development of the selection criteria, and the risk of bias assessment strategy.

Author 4 - Chenghao Yu - The author read, provided feedback and approved the final manuscript.