# INPLASY PROTOCOL

To cite: Wang et al. Metaanalysis of risk factors for enteral nutritional feeding intolerance in Chinese patients with severe acute pancreatitis. Inplasy protocol 202150055. doi:

10.37766/inplasy2021.5.0055

Received: 16 May 2021

Published: 16 May 2021

Corresponding author: Mingxin Wang

20201120314@stu.gzucm.edu.cn

### **Author Affiliation:**

Traditional Chinese Medicine University Of Guangzhou

**Support: NATCM.** 

Review Stage at time of this submission: Formal screening of search results against eligibility criteria.

**Conflicts of interest:** 

None declared.

## Meta-analysis of risk factors for enteral nutritional feeding intolerance in Chinese patients with severe acute pancreatitis

Wang, MX<sup>1</sup>; Lin, LJ<sup>2</sup>; Zhou, CJ<sup>3</sup>; Tan, ZJ<sup>4</sup>.

Review question / Objective: Population: Patients with severe acute pancreatitis were studied. Outcome: Outcome indicators were risk factors for enteral nutritional feeding intolerance (there were clear diagnostic criteria for enteral nutritional feeding intolerance). Study design: The types of studies were case-control studies and cohort studies.

Information sources: The Chinese and English databases included CNKI, VIP, Chinese Biomedical Literature Database, Wanfang Database, and English databases included Embase, PubMed, and The Cochrane Library

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 16 May 2021 and was last updated on 16 May 2021 (registration number INPLASY202150055).

#### INTRODUCTION

Review question / Objective: Population: Patients with severe acute pancreatitis were studied. Outcome: Outcome indicators were risk factors for enteral nutritional feeding intolerance (there were clear diagnostic criteria for enteral nutritional feeding intolerance). Study

design: The types of studies were casecontrol studies and cohort studies.

Rationale: Chinese people.

Condition being studied: Severe acute pancreatitis (SAP) is one of the most common acute severe diseases clinically, and belongs to a special type of acute

pancreatitis, accounting for 15%-20% of all acute pancreatitis. Patients with SAP are in a state of high catabolism, with high energy consumption, increased protein decomposition, gluconeogenesis and fat mobilization, which can easily lead to decreased immune function and malnutrition. The Chinese Guidelines on the Diagnosis and Treatment of Acute Pancreatitis in 2019 clearly pointed out that nutritional support is an important treatment measure for SAP patients, and recommended the implementation of enteral nutrition as early as possible. Enteral nutrition (EN) can improve intestinal barrier function, reduce bacterial toxin translocation, reduce long-term complications and improve prognosis. However, due to the extravasation of pancreatic juice into the abdominal cavity and toxin into the blood circulation, the systemic inflammatory response of SAP patients is aggravated and the function of multiple organs is impaired. Especially when gastrointestinal dysfunction, enteral nutrition often leads to the symptoms of vomiting, abdominal distension, diarrhea, stomach retention and other feeding intolerance (feeding intolerance) in the patient .In severe cases, enteral nutrition can be suspended or discontinued, affecting the patient's recovery. At present about the SAP patients with enteral nutrition feeding intolerance differences in risk factors of the research conclusion existed, this research aims to the SAP patients with enteral nutrition on our feeding intolerance research on risk factors of Meta analysis, discusses our country SAP patients with enteral nutrition feeding intolerance of risk factors, in order to provide evidence-based basis for clinical prevention and treatment.

#### **METHODS**

Search strategy: The Chinese and English databases included CNKI, VIP, Chinese Biomedical Literature Database, Wanfang Database, and English databases included Embase, PubMed, and The Cochrane Library. The Chinese search terms were severe acute pancreatitis, enteral nutrition, feeding intolerance, risk factors,

influencing factors, etc. The English key words are severe acute junctions, enteral nutrition, feeding feeding, Risk factors, Influence factor and so on.

Participant or population: Patients with severe acute pancreatitis.

Intervention: Intolerance to enteral nutrition feeding occurred.

Comparator: There was no enteral nutritional feeding intolerance.

Study designs to be included: The types of studies were case-control studies and cohort studies.

Eligibility criteria: Population: Patients with severe acute pancreatitis were studied. Outcome: Outcome indicators were risk factors for enteral nutritional feeding intolerance (there were clear diagnostic criteria for enteral nutritional feeding intolerance). study design: The types of studies were case-control studies and cohort studies.

Information sources: The Chinese and English databases included CNKI, VIP, Chinese Biomedical Literature Database, Wanfang Database, and English databases included Embase, PubMed, and The Cochrane Library

Main outcome(s): Outcome indicators were risk factors for enteral nutritional feeding intolerance (there were clear diagnostic criteria for enteral nutritional feeding intolerance).

Additional outcome(s): No.

Data management: EXECL data collection table.

Quality assessment / Risk of bias analysis: Newcastle-Ottawascale (NOS) was used to evaluate the quality of the included literature.

Strategy of data synthesis: Meta-analysis was performed using RevMan 5.3 software and Stata15.0 software.

Subgroup analysis: Risk factors with greater heterogeneity were analyzed by subgroup analysis.

Sensitivity analysis: The sensitivity analysis of risk factors was carried out by converting fixed effect model to random effect model.

Language: Chinese and English databases will be retrieved.

Country(ies) involved: China.

**Keywords:** Severe acute pancreatitis; Enteral nutrition; Feeding intolerance; Risk factors; Meta analysis.

#### Contributions of each author:

Author 1 - Mingxin Wang - The author Research and design, extract data and analyze data, write manuscript.

Email: 20201120314@stu.gzucm.edu.cn Author 2 - Lijun Lin - The author extracted the data and analyze data with author I.

Email: 3229256019@qq.com

Author 3 - Chunjiao Zhou - Research design and paper review.

Email: 3103948117@qq.com

Author 4 - Zhijian Tan - Research design

and paper review.

Email: 2779177674@qq.com