

INPLASY

The influence of anesthesia in long-term oncological outcomes after colorectal surgery: a systematic review of prospective studies

INPLASY2023110059

doi: 10.37766/inplasy2023.11.0059

Received: 14 November 2023

Published: 14 November 2023

Yang, YC¹; Zhang, YK².

Corresponding author:

Yuecheng Yang

yang890424@126.com

Author Affiliation:

Fudan University Shanghai Cancer Center.

ADMINISTRATIVE INFORMATION

Support - No funding.

Review Stage at time of this submission - Preliminary searches.

Conflicts of interest - None declared.

INPLASY registration number: INPLASY2023110059

Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 14 November 2023 and was last updated on 14 November 2023.

INTRODUCTION

Review question / Objective The aim of the study is to investigate the impact of anesthesia-related intervention in colorectal cancer recurrence and long-term survival in prospective studies.

Condition being studied The influence of anesthesia on cancer recurrence has become a hot topic in recent years. Preclinical experiments showed that anesthetic and analgesic may potentially impact the prognosis of the cancer. However, only a few studies reported long-term outcomes. Most prospective studies in this direction were published in the last ten years. It is necessary to perform a systematic review of prospective studies on the impact of anesthesia-related intervention on colorectal cancer recurrence and long-term survival.

METHODS

Participant or population Patients who underwent colorectal cancer surgeries under anesthesia.

Intervention Anesthesia-related interventions during surgery, including epidural anesthesia, nerve block, anesthetics, and analgesics.

Comparator Control group in individual studies. For example, epidural anesthesia VS general anesthesia.

Study designs to be included Prospective studies (including RCTs and cohort studies).

Eligibility criteria The inclusion criteria were: patients received colorectal cancer surgeries under anesthesia. (2) Intraoperative anesthesia-related intervention was used. (3) Cancer recurrence or

(and) long-term survival were measured outcomes.
(4) The follow-up period was at least 1 year. The Exclusion criteria were: (1) Animal research studies. (2) Retrospective studies. (3) Case series or reviews.

Information sources Pubmed, Web of Science, Embase, and Clinicaltrials.gov.

Main outcome(s) Long-term survival.

Additional outcome(s) Cancer recurrence or (and) metastasis.

Quality assessment / Risk of bias analysis
Cochrane Risk of Bias Tool will be used to assess the bias. Two authors will assess the bias of the included studies independently.

Strategy of data synthesis Outcomes will be represented in tables. Meta-analysis will not be performed because of high heterogeneity of the interventions.

Subgroup analysis Rectal and colon cancer, if necessary.

Sensitivity analysis NA.

Language restriction English language studies only.

Country(ies) involved China.

Keywords Anesthesia; long-term survival, rectal cancer; colon cancer, systematic review.

Contributions of each author

Author 1 - Yuecheng Yang.

Author 2 - Yunkui Zhang.