INPLASY PROTOCOL

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Review Stage at time of this submission: **Preliminary searches.**

Conflicts of interest:
None declared.

The role of cold forceps technique in diminutive colorectal polyps: a systematic review and meta-analysis of randomized clinical trials

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Review question / Objective: **The European Society of Gastrointestinal Endoscopy and the United States Multi-Society Task Force recommends the use of old snare polypectomy (CSP) for < 10 mm polyps. However, recent randomized clinical trials (RCTs) showed some conflicting results in cold forceps technique including cold forceps polypectomy (CFP) and jumbo forceps polypectomy (JFP) compared with CSP in diminutive colorectal polyps (DCPs) (≤5mm), especially in 1-3mm polyps.**
Condition being studied: **Current studies have some conflicting results in the cold forceps technique vs cold snare technique for diminutive colorectal polyps (≤5mm). This is the first systematic review and meta-analysis comparing the cold forceps technique with the cold snare technique in 1-5mm polyps. We evaluated these two techniques in terms of complete resection rate, mean polypectomy time, rate of retrieved polyps, and complication.**

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 25 November 2022 and was last updated on 25 November 2022 (registration number INPLASY2022110135).

INTRODUCTION

Review question / Objective: **The European Society of Gastrointestinal Endoscopy and the United States Multi-Society Task Force recommends the use of old snare polypectomy (CSP) for < 10 mm polyps. However, recent randomized clinical trials (RCTs) showed some conflicting results in cold forceps technique including cold forceps polypectomy (CFP) and jumbo forceps polypectomy (JFP) compared with CSP in diminutive colorectal polyps (DCPs) (≤5mm), especially in 1-3mm polyps.**

Rationale: Recent randomized clinical trials showed some conflicting results in cold forceps technique compared with CSP in diminutive colorectal polyps (DCPs) (≤5mm), especially in 1-3mm polyps.

Condition being studied: Current studies have some conflicting results in the cold forceps technique vs cold snare technique for diminutive colorectal polyps (≤5mm). This is the first systematic review and meta-analysis comparing the cold forceps technique with the cold snare technique in 1-5mm polyps. We evaluated these two techniques in terms of complete resection rate, mean polypectomy time, rate of retrieved polyps, and complication.

METHODS

Search strategy: Search Engine Incception-11/24/2022
EMBASE:
1.'colon polyp'/exp
2.'polypectomy':ab,ti OR 'colonic polyps':ab,ti
3.#1 OR #2
PubMed
1."Colonic Polyps"[Mesh]
2.(colonic polyp[Title/Abstract]) OR (polypectomy[Title/Abstract])
3.((colonic polyp[Title/Abstract]) OR (polypectomy[Title/Abstract])) OR ("Colonic Polyps"[Mesh]).

Participant or population: Patients with polyp size ≤5mm.

Intervention: Cold forceps technique.

Comparator: Cold snare technique.

Study designs to be included: RCTs that addressed outcomes of cold forceps technique vs snare forceps technique in study participants with polyp size ≤5mm.

Eligibility criteria: a)non-RCTs; b) abstracts only ; c) polyp size > 5mm; d) editorials, reviews, case reports, animal or in vitro studies.

Information sources: We systematically searched studies on PubMed and EMBASE databases.

Main outcome(s): Complete resection rate.

Additional outcome(s): a)mean polypectomy time b) rate of retrieved polyps c)complication.

Data management: EndNote.

Quality assessment / Risk of bias analysis: Cochrane Tool.

Strategy of data synthesis: The Mantel-Haenszel random effects model for binary endpoints, and the inverse variance method for continuous outcomes. We tested results for homogeneity across studies using the I2 test. We rated the overall quality of evidence using the Grading of Recommendations Assessment,Development and Evaluation approach.

Subgroup analysis: Subgroup analysis based on the polyp size, forceps used, histology criteria, and times of the bite.

Sensitivity analysis: After deleting any one of included studies,the pooled results of the remaining studies were not significantly different from those without deletion,which meant that the sensitivity analysis was passed.

Language restriction: No language restriction.

Country(ies) involved: China (Guizhou medical university).

Keywords: Cold forceps polypectomy; Jumbo forceps polypectomy; Cold snare polypectomy; randomized clinical trials; diminutive colorectal polyps; Meta-analysis.

Contributions of each author:
Author 1 - Lv Yongcai - Lv YC designed the study, wrote the manuscript, and

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