

INPLASY PROTOCOL

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

Conflicts of interest:
None.

acquired rectourethral and rectovaginal fistulas in children: a systematic review of etiology, managements and outcomes

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Review question / Objective: The goal was to systematically summarize different causes, provide an overlook of current clinical trend and to derive recommendation from the literature regarding the etiology, managements, and outcomes of pediatric acquired RUF and RVF. P: Acquired rectourethral (RUF) or rectovaginal fistulas (RVF) in children I: surgery or medicine C:/ Outcome: fistula closure; living status.

Condition being studied: Acquired rectourethral (RUF) or rectovaginal fistulas (RVF) in children are rare conditions but a Gordian knot for pediatric surgeons. Despite various reasons leading to acquired RUF and RVF, reported incidence is low and mishandled cases are frequent. Conservative treatments are attempted, however, irrespective of etiology, most children with RUF and RVF do not respond well to FD alone and require further treatments. Definitive repairs for children are considered more difficult than adults. There is no established convention at present. Narrative review reflects the uncertainty and confusion, notably, fails to provide evidence-based knowledge.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 20 January 2021 and was last updated on 20 January 2021 (registration number INPLASY202110078).

INTRODUCTION

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METHODS

Participant or population: Child diagnosed acquired rectourethral (RUF) or rectovaginal fistulas.

Intervention: Surgery or medicine.

Comparator: No.

Study designs to be included: We included randomized controlled trials and observational studies: cohort prospective or retrospective, case-control and cross-sectional studies.

Eligibility criteria: Child diagnosed acquired rectourethral (RUF) or rectovaginal fistulas.

Information sources: A MEDLINE and Embase search were performed under 3 key terms with no date limits: 1) "rectourethral fistula" OR "recto-urethral fistula," 2) "urethrorectal fistula" OR "urethro-rectal fistula," 3) "rectovaginal fistula." These 3 key terms were then narrowed: 1) English, 2) Human, 3) Child (< 18 years). Ovid and the Cochrane library databases were searched using 2 key terms: 1) "rectourethral fistula" and 2) "rectovaginal fistula." Pertinent references were searched manually.

Main outcome(s): Fistula closure.

Quality assessment / Risk of bias analysis: All included studies will be assessed for their methodological quality. The Cochrane Collaboration's risk of bias tool will be used (Rev Man 5.3) for RCT studies. The criteria consist of 7 items: random sequence generation, allocation concealment, blinding of participants and researchers, blinding of outcome assessment, incomplete outcome data, selective outcome reporting, and other sources of bias. For observational studies the Newcastle-Ottawa Scale will be used.

Strategy of data synthesis: Two reviewers (Huang and Tan) independently read all full articles and compiled pertinent data. Any disagreement will be resolved by discussion until consensus is reached or by consulting a third author. The following data will be extracted: 1) author and publication year, 2) number of RUF and/or RVF patients, 3) mean or median age, 4) etiology, 5) number of RUF and/or RVF patients underwent surgical interventions, 6) number of patients who had temporary FD and/or UD, 7) type of surgical repair, 8) tissue flap usage, 9) treatment outcomes, 10) follow-up period, 11) prognosis.

Subgroup analysis: No subgroups.

Sensibility analysis: If necessary, an analysis of the sensitivity.

Country(ies) involved: Mainland China.

Keywords: Rectourethral fistula, Rectovaginal fistula, Acquired fistula, Pediatric surgery, Systematic review.

Contributions of each author:

Author 1 - XINJIE HUANG - Project, study selection, data extraction and article writing.

Author 2 - SARAH SIYIN TAN - Project, study selection, data extraction and article writing.

Author 3 - YAJUN CHEN - data analysis and writing.

Author 4 - TIAN LI - data analysis and writing.