

# INPLASY PROTOCOL

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

**Conflicts of interest:** None declared.

## Risk Factors for Urinary Retention following Pelvic Organ Prolapse Surgery: A meta-analysis

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**Review question / Objective:** P:patients with pelvic organ prolapse who underwent pelvic floor reconstruction. E:related risk factors. O:prevalence rate of urinary retention. S:cohort, Case control and cross-sectional study.

**Condition being studied:** Pelvic organ prolapse (POP) is a common health problem for elderly women. At present, pelvic floor reconstruction is the main treatment for severe POP, but pelvic floor reconstruction can affect the urinary function of patients, and urinary retention is one of the most common problems, with the incidence of 13-45%. Prolonged urinary retention may cause bladder dilatation with detrusor injury, ureteral reflux, secondary renal insufficiency and urinary tract infection, and even lead to permanent damage to renal function, causing serious anxiety and pain in patients, impeding rapid recovery after surgery, prolonging hospital stay, and increasing the medical burden of patients. Currently, the exact cause of its occurrence is not completely clear.

**INPLASY registration number:** This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 30 January 2023 and was last updated on 17 January 2024 (registration number INPLASY202310088).

### INTRODUCTION

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## METHODS

**Participant or population:** Patients with pelvic organ prolapse who underwent pelvic floor reconstruction.

**Intervention:** None.

**Comparator:** Patients with no urinary retention after pelvic floor reconstruction.

**Study designs to be included:** cohort study, case control study and Cross sectional study.

**Eligibility criteria:** Inclusion criteria: ①Chinese and English literature. ②The subjects are patients with clinically diagnosed pelvic organ prolapse who needed pelvic floor reconstruction surgery, excluding preoperative urinary retention, urinary tract infection, bladder injury or bladder dysuria. ③The outcome index was postoperative urinary retention, irrespective of the diagnostic criteria used. Exclusion criteria: ①repeatedly published. ②unable to obtain full text. ③Literature with incomplete data or obvious errors.

**Information sources:** Two researchers searched Chinese database (CBM, CNKI, Wanfang, VIP) and English database (PubMed, Cochrane Library, EMBASE, Web of Science, CINAHL).

**Main outcome(s):** urinary retention irrespective of the diagnostic criteria used.

**Quality assessment / Risk of bias analysis:** The Newcastle Ottawa scale (NOS) was used to evaluate the bias risk of cohort study and case control study. Cross sectional study bias risk assessment using US health care quality and research (Agency for Healthcare Research and Quality, AHRQ) recommended evaluation criteria.

**Strategy of data synthesis:** Stata13.0 will be used for statistical analysis.

**Subgroup analysis:** If enough available data is extracted, subgroup analyses will be performed based on study design or data analysis method of the original study.

**Sensitivity analysis:** If sufficient available data are extracted, we will conduct sensitivity analysis to check the stability for the outcome results by excluding studies with high risk of bias.

**Country(ies) involved:** China.

**Keywords:** pelvic floor reconstruction, pelvic organ prolapse, urinary retention, risk factors.

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