

CIC vs SPC: An Evidence-Based Comparison for Neurogenic Bladder Management

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Key Conclusions

- 1.**Superior Protection:**CIC reduces hydronephrosis risk (9.3% vs 25%).
- 2.**Fewer Complications:**Lower UTI and re-intervention rates.
- 3.**Better QoL:**Improved physical and mental well-being.
- 4.**Clinical Preference:**Recommended as the long-term option.
- 5.**Optimal CIC Regimen:**Partial CIC (≤ 4 times/day) is a superior option for patients with residual urination ability, reducing infections without increasing risks.

01 Background & Study Design

Background: Neurogenic bladder causes upper tract damage; the optimal choice between CIC and SPC is unclear. Methods: A retrospective cohort study with 1:1 PSM to eliminate confounding factors.

02 Mechanism of Two Interventions

CIC:Simulates physiological urination, low infection risk.**SPC:**Requires long-term indwelling, prone to complications.

03 Key Outcome Data Comparison

Hydronephrosis:9.3% (CIC) vs 25% (SPC).
UTI:1.6 vs 2.1 episodes/year.
QoL:Higher SF-Qualiveen score ($P<0.001$).
CIC Subgroup Analysis:Within the CIC group, patients performing **partial CIC (≤ 4 times/day)** experienced fewer UTIs and better symptom scores compared to those performing **complete CIC (>4 times/day)**, with no significant difference in upper urinary tract safety.

04 Clinical Practice Recommendations

CIC is superior to SPC in protecting upper tract function, reducing complications and improving QoL, and is recommended as the first choice for long-term management. For patients with residual urination ability, an optimized CIC regimen of ≤ 4 times per day is recommended to enhance outcomes.