

## GEJALA TRAKTUS URINARIUS BAWAH PASCA OPERASI TRANSANAL ENDORECTAL PULL THROUGH DI RSUP DR. SARDJITO

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### INTISARI

**Latar Belakang :** Penyakit Hirschsprung (HSCR) adalah gangguan migrasi pada sistem saraf intestinal yang ditandai dengan tidak adanya sel ganglion pada kolon. Salah satu manajemen definitif HSCR adalah dengan metode operasi *transanal endorectal pull-through* (TEPT). Gejala traktus urinarius bagian bawah (LUTS) meliputi gejala berkemih (obstruktif) & gangguan penyimpanan (iritasi) yang dapat terjadi pada kasus HSCR secara iatrogenik pasca operasi. Informasi luaran genitourinari pasien HSCR pasca operasi TEPT masih terbatas.

**Tujuan :** Untuk mengetahui adanya luaran LUTS pasca tindakan TEPT terhadap pasien Hirschsprung (HSCR) di RSUP. Sardjito dan hubungan karakteristik subjek dengan gejala LUTS.

**Metode :** Penelitian ini merupakan penelitian observasional secara retrospektif dan prospektif pada 33 pasien TEPT yang menjalani operasi sejak Januari 2014 hingga Oktober 2020 di RSUP Dr. Sardjito. Data diambil dari rekam medis dan hasil kuesioner yang dibagikan melalui wali pasien. Hasil dianalisis dengan uji *chi-square* dan dibandingkan dengan luaran LUTS pada 34 subjek kontrol.

**Hasil :** Luar LUTS pasien HSCR pasca operasi TEPT dinilai menggunakan kuesioner *Danish LUTS Symptoms*, dimana dari 12 tipe gejala LUTS terdapat hubungan signifikan ISK dengan subjek kontrol ( $p=0,019^*$ ) dan mengompol dengan pasien TEPT ( $p=0,007^*$ ). Karakteristik subjek pasien TEPT yang memiliki hubungan dengan LUTS adalah usia kehamilan terhadap penyakit saluran kencing ( $p=0,003^*$ ); urgensi ( $p=0,038^*$ ) dan komorbiditas terhadap ISK ( $p=0,003^*$ ); frekuensi BAK ( $p=0,008^*$ ); *urge incontinence* ( $p=0,003^*$ ); dan frekuensi mengejan ( $p=0,017^*$ ). Kedua karakteristik tersebut terbukti memiliki hubungan signifikan juga pada uji regresi logistik dan bisa dianggap sebagai faktor prognosis.

**Kesimpulan :** Terdapat luaran LUTS pasca tindakan TEPT terhadap pasien HSCR di RSUP. Sardjito yang tidak jauh berbeda dengan subjek kontrol dan terdapat hubungan karakteristik subjek (usia kehamilan dan komorbiditas) terhadap luaran LUTS pada pasien TEPT.

**Keyword(s) :** Hirschsprung (HSCR); *Transanal Endorectal pull-through* (TEPT); Gejala Traktus Urinarius Bawah (LUTS); *Danish LUTS Symptom*

## LOWER URINARY TRACT SYMPTOMS POST TRANSANAL ENDORECTAL PULL THROUGH AT RSUP DR. SARDJITO

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### ABSTRACT

**Background :** Hirschsprung's disease (HSCR) is a migration disorder of the intestinal nervous system characterized by the absence of ganglion cells in the colon. One of the definitive management of HSCR is the transanal endorectal pull-through (TEPT) surgery method. Lower urinary tract symptoms (LUTS) such as voiding (obstructive) & storage disorders (irritation) may occur in postoperative iatrogenic HSCR cases. Information and research on the genitourinary outcome of postoperative HSCR patients with TEPT is still limited.

**Objective:** To determine the LUTS outcome in Hirschsprung (HSCR) patients after TEPT at RSUP Dr. Sardjito and to know the relationship between subject characteristics and LUTS symptoms.

**Methods :** This study is a retrospective and prospective observational study on 33 TEPT patients who underwent surgery from January 2014 to October 2020 at RSUP Dr. Sardjito. Data was taken from medical records and the results of questionnaires were distributed to the patient's guardian. Results were analyzed by chi-square test and compared to LUTS outcomes in 34 control subjects.

**Result :** The LUTS outcome of post TEPT in HSCR patients was assessed using the Danish LUTS Symptoms questionnaire, where of the 12 types of LUTS symptoms there was a significant relationship between UTI and control subjects ( $p = 0.019 *$ ) and bedwetting with TEPT patients ( $p = 0.007 *$ ). Characteristics of TEPT patient subjects that had a relationship with LUTS were gestational age against urinary tract disease ( $p = 0.003 *$ ); urgency ( $p = 0.038 *$ ) and comorbidity against UTI ( $p = 0.003 *$ ); BAK frequency ( $p = 0.008 *$ ); urge incontinence ( $p = 0.003 *$ ); and the frequency of pushing ( $p = 0.017 *$ ). Both of these characteristics are shown to have a significant relationship also in the logistic regression test and can be considered as prognostic factors.

**Conclusion :** There is LUTS outcome for HSCR patients after TEPT in RSUP Dr. Sardjito, but there was no differences from the control subjects. There is a relationship between the subject's characteristics (gestational age and comorbidity) and the LUTS outcome in TEPT patients.

**Keyword(s) :** Hirschsprung (HSCR); *Transanal Endorectal pull-through* (TEPT); Lower Urinary Tract Syndrome (LUTS); *Danish LUTS Symptoms*

