## Correlating complications of Transurethral Complications of Prostate using the Charlson's Comorbidity Index

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## **ABSTRACT**

**Introduction:** Ageing is a continuous, universal and progressive process associated with an increasing incidence of comorbidities. Benign Enlargement of Prostate (BEP) is major cause of morbidity in the ageing men. Transurethral Resection of Prostate (TURP) is the Gold Standard for patients with BEP and delivers durable outcomes, however, is associated with morbidity and mortality. This study was conducted to analyze the correlation of these comorbidities in ageing men with the incidence of complications of TURP.

**Objective:** To report and grade operative complications of TURP using Modified Clavien Classification System (MCCS) and analyze whether Charlson Comorbidity Index (CCI) predicts complications after TURP.

**Methods:** This is a prospective analytical study of 77 patients diagnosed as Benign Prostatic Hyperplasia (BPH) undergoing TURP over one year at Tribhuvan University Teaching Hospital. Preoperative morbidity was classified using Charlsons Comorbidity and postoperative complications were graded according to Modified Clavien Classification System (MCCS) into five grades (Grades I, II, IIIa, IIIb, IVa, IVb and V) according to severity followed till 90 days after TURP.

**Results:**Fourteen out of seventy seven (18.2%) patients developed postoperative complications. CCI Scores of <1 were observed in 73 (94.8%) and >2 in 4 (5.2%) patients, constituting the bulk of 93%, Grade IV complications were 7% and no mortality was observed. Patients with higher CCI scores showed statistically significant increase in the grade of postoperative complication and positively correlated to MCCS ( $\rho$  of .295;  $\rho$  value <0.009).

**Conclusion:** Men with higher CCI scores have significantly higher grade of postoperative complications.

**Keywords:** Benign Enlargement of Prostate, Charlson's Comorbidity Index, Modified Clavien Classification System, Transurethral Resection of Prostate.