

ASSESSMENT OF COMORBIDITIES IN PATIENTS WITH OVERACTIVE BLADDER (OAB) DISORDER: AN ELECTRONIC MEDICAL RECORD (EMR) DATA ANALYSIS

Introduction and Objective: To compare OAB patients to non-OAB patients by assessing their pre-existing comorbidities prior to their OAB diagnosis or first OAB treatment.

Methods: This retrospective cohort study used the General Electric (GE) Centricity EMR database. The study subjects were from between 01/01/1996 to 3/30/2007. The index date for OAB patients was defined as the date of their first prescription for an antimuscarinic agent or a diagnosis for OAB identified by ICD-9 codes. The index date of non-OAB subjects without diagnosis or pharmacy claim was defined as a year after the first activity date in the EMR. Subjects ≥ 18 years old were included and had 395 days of continuous enrollment before and after the index date. Non-OAB subjects were matched to OAB subjects on 1:1 propensity score matching based on age, body mass index (BMI) and gender at baseline. Two linear regressions were constructed using the outcome variables of the Charlson Comorbidity Index (CCI), using ICD-9 codes, and the Chronic Disease Score (CDS), using prescribed drugs, respectfully.

Results: There were 38,739 OAB subjects [mean age 61.18 (SD:13.26) years; 85.67% women] and 38,739 matched non-OAB subjects [mean age 61.17 (SD:13.24) years; 85.70% women]. Patients with OAB had higher mean CCI and CDS than subjects without OAB [(CCI: 1.17 vs. 1.11 (p-value<0.001); CDS: 2.95 vs. 1.74 (p-value<0.001)]. After controlling for other covariates, the linear regressions (n=22,544) showed that OAB patients had higher CCI and CDS than subjects without OAB by 0.037 (p-value<0.001) and by 0.881 (p-value: <0.001), respectively.

Conclusions: This study determined that pre-existing comorbidities were more prevalent in OAB patients than in non-OAB patients. These comorbidities should to be taken into account when making the decision on the most appropriate treatment option for each individual patient

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Was this study approved by an ethics committee?	Yes
Specify Name of Ethics Committee	University of Utah IRB
Was the Declaration of Helsinki followed?	Yes
Was informed consent obtained from the patients?	Yes