

Antimuscarinic Use in Females with Overactive Bladder Syndrome Increases the Risk of Depressive Disorder: A Three-year Follow-up Study

AU C F¹, Chung S¹, Huang C², Lin H³, Kao L⁴

1. Division of Urology, Far Eastern Memorial Hospital 2. Department of Urology, National Taiwan University Hospital 3. National Taiwan University 4. Department of Biotechnology and Laboratory Science, College of Medicine, Chang Gung University, TAIWAN

Purpose: To date, the relationship between antimuscarinics for overactive bladder (OAB) syndrome and depressive disorder still remains unclear. Therefore, this retrospective cohort study examined the association between antimuscarinic use and the subsequent risk of depressive disorder using a population-based dataset.

Materials and Methods: This study used data from the Taiwan Longitudinal Health Insurance Database 2005. We selected 1952 OAB women who received antimuscarinics as the study cohort and 9760 OAB women who did not receive antimuscarinics as the comparison cohort. Each subject was tracked for 3 years from their index date to determine all of those who were subsequently diagnosed with depressive disorder.

Results: Results indicated that the adjusted hazard ratio (HR) for depressive disorder in OAB women who received antimuscarinics was 1.38 (95% confidence interval (CI): 1.15~1.64) compared to those OAB women who did not receive antimuscarinics. Additionally, the adjusted HRs for subsequent depressive disorder for OAB women aged 18~39, 40~59, and ≥60 years who received antimuscarinics were 1.83 (95% CI: 1.27~2.64), 1.36 (95% CI: 1.03~1.81), and 1.16 (95% CI: 0.86~1.56), respectively, compared to those OAB women who did not receive antimuscarinics.

Conclusions: We concluded that women with OAB who received antimuscarinics had a significantly higher risk of subsequent depressive disorder compared to those OAB women who did not receive antimuscarinics. Accordingly, clinicians should be alert to the relationship between antimuscarinics usage and depressive disorder in OAB women and provide appropriate instructions for these patients.