A RETROSPECTIVE COHORT STUDY OF DIABETES MELLITUS AND ANTIPSYCHOTIC TREATMENT IN THE UNITED KINGDOM


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OBJECTIVE: In this retrospective cohort study, we explored the UK General Practice Research database (GPRD) to determine the hazard ratio of diabetes mellitus (DM) for patients prescribed antipsychotics compared with the GPRD general patient population in the UK.

METHODS: An antipsychotic cohort comprised of patients exposed to both conventional and atypical antipsychotics (N = 46,111), individual antipsychotic cohorts comprised of patients exposed to a single antipsychotic, and a general patient population cohort (N = 266,272) derived from the GPRD database were studied. A Cox proportional hazard regression model was used to determine the hazard ratio (HR) of diabetes development between these cohorts. The covariates included in the model were age, gender, and the presence or absence of obesity.

RESULTS: Compared to the GPRD general patient population cohort, patients exposed to antipsychotics had a higher risk of developing diabetes (HR = 1.5; CI = 1.1–1.9). The risk of developing diabetes during exposure to thioridazine and risperidone was significantly higher than that of the GPRD general patient population. Assessment of other antipsychotics was limited by sample size of the cohorts.

CONCLUSIONS: Patients exposed to antipsychotic drugs have an increased risk of developing diabetes. It remains unclear to what extent the increased risk of diabetes is related to treatment factors or factors related to the underlying psychiatric conditions commonly treated with antipsychotic drugs.