

A retrospective review of state sector outpatients (Tara Hospital) prescribed olanzapine: -
adherence to metabolic and cardiovascular screening and monitoring guidelines.

Dr Carina Marsay

A research report submitted to the Faculty of Medicine, University of the Witwatersrand
Medical School, Johannesburg, in partial fulfilment of the requirements for the degree
Masters of Medicine in the branch of Psychiatry.

Johannesburg

2010

Abstract

Introduction

Antipsychotics are used for the treatment of psychotic disorders, most commonly schizophrenia, as well as mood disorders e.g. bipolar mood disorder. The efficacy of the newer second generation (atypical) antipsychotics is equivalent to first generation antipsychotics. The apparent advantage of the second generation antipsychotics is related to their purported reduced side effect profile, thus making them more desirable due to improved compliance and relapse prevention. The limiting factor with this class of drugs, especially in the state sector in South Africa, has been the cost. However, reports of treatment-emergent adverse events such as diabetes mellitus, diabetic ketoacidosis, hyperglycaemia and dyslipidaemia in patients receiving second generation antipsychotics have increased in recent times. This has led to growing concern about the link between metabolic complications and their use, with consequent reconsideration of the implications of prescribing.

Aims

The study aimed to establish the extent to which metabolic and cardiovascular screening and monitoring has been undertaken on patients who have been prescribed olanzapine, a second generation antipsychotic. Specifically the extent to which the American Diabetes Association Consensus Conference monitoring protocols were being implemented in a specialist psychiatric South African setting i.e.: at Tara: The H. Moross Centre's outpatient department.

Objectives

The study objectives were to describe the demographic profile, clinical diagnosis and risk factors for metabolic complications in a sample of patients receiving olanzapine. Further, to establish the extent to which metabolic and cardiovascular screening and monitoring has been undertaken on patients prescribed olanzapine as well as to what extent the patients's demographics, diagnosis and metabolic risk factors influenced the treating doctor's adherence to screening guidelines.

Method

This study was undertaken at Tara: The H. Moross Centre (outpatient department). A convenience sample of patients prescribed olanzapine were selected as the study group. The study involved a review of case records. It was a retrospective descriptive study. Relevant data was entered on a data sheet, designed for the study in accordance with the objectives and

adapted from the American Diabetes Association Consensus Development Conference on Antipsychotic Drugs, Obesity and Diabetes. The data sheet is based on an existing protocol for monitoring metabolic status.

Frequencies for the presence or absence of evidence of screening or monitoring for metabolic complications were established, as per American Diabetes Association monitoring protocol requirements. Although the study involved outpatients, not all patients were initiated on olanzapine as outpatients i.e. some of the prescribing was inpatient initiated.

Results

The sample comprised of 19 females and 20 males. 48.72% female and 51.28% male. The mean age of females in the sample was 52.38 years (SD=16.20) and the mean age of males was 41.28 (SD=17.05) years. The sample were predominantly single (61.54% n=24) with the majority being white (79.49% n=31); most had either tertiary (43% n=17) or secondary (53.85% n=21) level of education. Only 2.56% (n=1) had only primary level education. With regards to the diagnoses of patients in the sample, 17.95% (n=7) were diagnosed with bipolar 1 disorder, 7.69% (n=3) with major depressive disorder with psychosis, 20.51% (n=8) schizoaffective disorder and 53.84% (n=21) with schizophrenia. The percentage of screening for all the parameters was generally less than 20% and it continued to decline to less than 20% until 4 months. The exception was weight, where frequency increased slightly over time. Comparing inpatient versus outpatient initiated treatment there were apparent differences in the extent of screening i.e. greater for inpatient initiated treatment, specifically with respect to weight and blood pressure.

Conclusion

The current study was conducted in a very specific setting, but the findings demonstrated an area requiring attention i.e. adherence to acceptable clinical guidelines. Whilst one can only speculate on the basis for non-adherence, having established the status quo, there is a requirement for an appropriate strategy to address the deficit, given the implications of inadequate monitoring.