Abstract:

Background: Hyperprolactinaemia is a common but often neglected side effect of antipsychotic treatment. It might cause a variety of symptoms and adverse effects on patients' health. In local practice, prolactin level is not routinely checked but only when there is clinical suspicion e.g. symptoms of hyperprolactinaemia. The objectives of this study were to analyze the characteristics of patients who were on antipsychotics and had prolactin level measurement, to find out the pick-up rate of confirmed hyperprolactinaemia among those patients with suspected symptoms of hyperprolactinaemia, and to identify factors associated with symptomatic hyperprolactinaemia. Also, how hyperprolactinaemia was managed in the psychiatric unit of a local acute hospital was studied.

Design: A retrospective review of patient notes

Setting: The psychiatric unit of a local acute hospital in Hong Kong

Sample: Adult psychiatric patients (age 15-65 inclusive) attending follow up in the psychiatric outpatient clinic and receiving antipsychotic treatment, who had prolactin level measurement during the period 1st January 2008 to 31st December 2010.

Measures: Socio-demographic data, psychiatric diagnosis, antipsychotic treatment, other psychiatric treatment, comorbid physical illness, concomitant medical treatment, presenting suspected symptom of hyperprolactinaemia, serum prolactin level measurement, management of hyperprolactinaemia, outcome of management

Results: 293 cases were included in this study, 237 cases (80.9%) had hyperprolactinaemia, among which 209 cases were female (88.2%). The mean age of hyperprolactinaemia cases was 32.9 years (S.D. 10.1) and median age was 32 years. From multiple logistic regression for female hyperprolactinaemia cases, 6 factors were found to be significant. The presence of amenorrhoea (OR: 10.11, p=0.001) was very indicative of hyperprolactinaemia. The use of sulpiride (OR: 12.05, p=0.003), amisulpride (OR: 16.00, p=0.017) and risperidone (OR: 6.27, p=0.004) increased the risk of hyperprolactinaemia. Clozapine (OR: 0.09, p=0.03) had protective effect to hyperprolactinaemia. Diagnosis of depression (OR: 0.22, p=0.014) was a negative predictive factor for hyperprolactinaemia. Study of the management of antipsychotic

induced hyperprolactinaemia for female cases found that swapping antipsychotic medication was likely to achieve resolution of symptom ($\chi^2 = 6.03$, p=0.014) and normalization of prolactin level ($\chi^2 = 15.77$, p=0). Stopping oral antipsychotic was likely to achieve normalization of prolactin level (FET, p=0.048). No change in antipsychotic regime was likely to decrease the chance of symptom resolution ($\chi^2 = 14.41$, p=0) and decrease the chance of normalization of prolactin level ($\chi^2 = 23.20$, p=0).

Conclusion: Hyperprolactinaemia is a common side effect of antipsychotics; it might cause short and long term adverse effects on patients' quality of life and health, and it possibly affects patients' compliance to antipsychotic treatment. Hyperprolactinaemia is no longer unavoidable, proactive approach in preventing, detecting and treating this side effect is important in daily psychiatric practice.

Key words: hyperprolactinaemia, antipsychotic, neuroleptic, management