

Plasma Prolactin Levels In Patients Treated For Schizophrenia

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Statement of the Problem: Hyperprolactinaemia is a common side-effect of antipsychotic treatment and the clinical consequences associated with this can have a negative impact on patients compliance. The aim of this study was to investigate the frequency of hyperprolactinemia in patients with schizophrenia treated with antipsychotics. Methodology & Theoretical Orientation: This was a descriptive study conducted at the Polyclinic of Speciality Nr.3, Tirana, Albania over a period of two years. It included 76 patients, 23 (30.3%) of whom were females and 53 (69.7%) males. Blood collection and examination were performed at laboratory in Polyclinic of Speciality Nr.3, Tirana with Immunoassay autoanalyzer MAGLUM 800 fully-auto chemiluminescence immunoassay analyzer Baseline fasting serum prolactin levels were taken followed by administration of haloperidol and olanzapine respectively. A second serum prolactin level was then taken and assessed by the same prolactin measuring kit. Findings: The mean serum prolactin levels of all subjects in the first measurement was $M=306.4 (\pm 446.6) \mu\text{IU/l}$ with a range 42-3104. No significant difference was found by gender ($t= 1.01$ $p=0.6$) whereas by type of treatment the level of prolactin was significantly higher among patients treated with haloperidol $746.0 (\pm 864.0) \mu\text{IU/l}$ compared to other antipsychotics $198.4 (\pm 121.9)$, ($t=2.5$ $p=0.03$). A second measurement of prolactin levels was done two years after the treatment resulting in a significant increase of prolactin levels ($M=554.2 \pm 548.5$) $\mu\text{IU/l}$ with a range 234 – 3104 as compared to baseline levels. The rise in serum prolactin levels in second measurement was significantly higher in both, males $M=445.6 (\pm 534.3) \mu\text{IU/l}$ and females $M=534.9 (\pm 595.6) \mu\text{IU/l}$ ($p<0.01$). The mean level of prolactin among females is significantly higher as compared to males ($p<0.01$). Conclusion & Significance: Assessment of prolactin levels could be an important biological marker for the severity of psychopathology of schizophrenia. Appropriate investigations and effective management should reduce the burden of adverse effects.

Biography

Adriana Prifti is laboratory physician at Polyclinic of Specialities, No.3 Tirana, Albania since the year 2000. She is a PhD candidate.

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