
Proceedings

Prevalence and management of dyslipidaemia in hypertensive patients attending Federal Medical Centre, Asaba, Delta State

Proceedings of the University of Benin, Faculty of Pharmacy Research Day. February, 2018

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Abstract

Purpose: To investigate prevalence, describe pattern and management of dyslipidaemia in hypertensive patients.

Methods: A descriptive cross-sectional study was carried out on hypertensive patients attending Federal Medical Centre, Asaba.

Results: A total of 518 patients were evaluated. Prevalence of dyslipidaemia was 55.8%. The mean

percentage reduction on LDLC was Atorvastatin 34.3%, Simvastatin 40.2% and Rosuvastatin 35.8%.

Conclusion: Prevalence of dyslipidaemia was 55.8% with LDLC being the most common. The effect of the Statins was a significant improvement on the plasma lipid levels.

Keywords: Prevalence, dyslipidaemia, medications, management

Indexing: Index Copernicus, African Index Medicus

Background

Dyslipidaemia is a major risk factor for cardiovascular diseases that can be identified and effectively managed.

Aim/Objectives

To investigate prevalence and describe pattern of dyslipidaemia in hypertensive patients. The study also identified medications used in management and the effect of therapy on abnormal lipid levels.

Materials and Methods

A descriptive cross-sectional study was carried out on hypertensive patients attending the Medical Out-Patient clinic of the Federal Medical Centre, Asaba. Using a data form: basic demographics, Blood Pressure readings, Body Mass Index, medications prescribed and fasting lipid profile reports at initial and after eight weeks of therapy were collected. Dyslipidaemia was defined by the third report of National

Cholesterol Education Panel while effect of therapy was defined by National Lipid Association guidelines. Descriptive analysis was computed and compared inferentially using Student's t-test and Pearson's coefficient at $p < 0.05$.

Results

A total of 518 patients were evaluated in the study (female: 60.8%) with a mean age of 53.05 ± 11.76 years. Mean Body Mass Index was 27.54 ± 3.05 for males and 28.37 ± 5.62 for females. Prevalence of dyslipidaemia was 55.8% with the pattern being Low Density lipoprotein cholesterol (LDLC), High Density Lipoprotein Cholesterol (HDL), Total Cholesterol (TC) and Triglycerides (TG) in descending order. Statins (Atorvastatin, Simvastatin, Rosuvastatin) were the medications used for therapy. The mean percentage reduction of Atorvastatin was 27.3% (TC), 15.0% (TG), and 34.3% (LDLC) while HDL had 21.2% increase. Simvastatin effect was reductions of 21.9% (TC), 5.3% (TG), 40.2% (LDLC) and increase of 19.4% on HDL-

C. Rosuvastatin had an increase of 25.71% on HDL-C and mean reductions of 24.5% (TC), 25.6% (TG) and 35.8% (LDLC). The observed effects were significant with p values < 0.05. No correlation was observed between response to therapy and age/gender.

Conclusion

Prevalence of dyslipidaemia was 55.8% in the hypertensive patients studied with LDLC being the most common. Statins were the medications employed in management. The effect of these medications was a significant improvement on the plasma lipid levels.

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