Chapter Four

4.1 Discussion

This study had been conducted to evaluate the effects of antipsychotic medications on serum lipids profiles in Sudanese Psychiatric and non-psychiatric, this study consist of 110 individual, 60 was psychiatric and 50 non-psychiatric as normal control, all subjects from Kobar Mental Asylum Psychiatric Hospital. In the present study, the mean level of TG, LDL increased, and HDL level is decrease and no statistically association seen in TC levels among participants who used antipsychotics medication compared to the control group.

Previous study showed that High lipid levels were found in persons treated with compared with persons not using such medication which is in agreement with our study, the results of our study suggested that antipsychotic medication have a considerable impact on elevating serum TGs and LDL level, while decease HDL level. Therefore, increase risk of cardiovascular disease among psychiatric patients.

In the current study, find that there was significant difference between TGs, LDL and HDL level in patient use antipsychotic medication. This finding is in agreement with studies conducted in Singapore 2009[15] and that one carried out in Finland (1997-1998)[16].

This study, found that no statistically association between TC level and antipsychotic medication, so this finding in contrast with the previous studies done in Singapore 2009 and that one in Finland (1997-1998) [15] [16]. We suggest these differences might be attributed to the individual susceptibility, genetic variables, and dietary factors.

In this series, the duration of antipsychotic medications is statistically associated with the elevating serum TGs level. This finding is in accordance with previous studies [15, 16].

In this study, the duration of antipsychotic medications is not statistically associated with the serum TC, LDL and HDL levels. These findings are in contrast with the previous studies [15, 16].
4.2 Conclusion

In conclusion, Lipid levels in subjects who used antipsychotics medication were significantly increases in TGs and LDL levels and significantly decrease in HDL levels. So the uses of anti psychotic’s medication increase risk of developing cardiovascular disease.

4.3 Recommendations

1. Following standard policy and guidelines for prescribing medication, mainly for antipsychotics medication so as to prevent Inappropriate Use of antipsychotic Drugs.
2. As psychiatric persons are at risk of developing hyperlipidemia, their lipid levels should be regularly monitored.
3. To prevent risk of developing cardiac disease, Cholesterol-lowering diet, as well as medication, should be considered.
4. Future research is highly needed in serum lipid profiles psychiatric patients.
References


Committee on Preventing the Global Epidemic of Cardiovascular Disease ; Chapter 2. ISBN 978-0-309-14774-3. Cite uses deprecated parameters (help)


Protocols for the Preparation of Blood Plasma and Serum, ProImmune Limited • The Magdalen Centre • The Oxford Science Park • United Kingdom. Registered in England.


Appendix-1

Sudan University of Science and Technology
College of Graduate Studies
Department of Clinical Chemistry
Assessment of the effect of antipsychotic medication on serum lipids profile- at Khartoum state.

**Questionnaire (No. _____)**

Date:______________________________________________________

Patient ID:____________________________________________________

Age:________________________________________________________

Drugs uses:___________________________________________________

Duration of medications:________________________________________

Other diseases:_______________________________________________

<table>
<thead>
<tr>
<th>Test</th>
<th>Result/ mg/dl</th>
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<tbody>
<tr>
<td>Cholesterol level</td>
<td></td>
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<tr>
<td>Triglyceride level</td>
<td></td>
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<tr>
<td>HDL-C level</td>
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<td>LDL-C level</td>
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