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## The relationship between alterations in microanatomy of liver and lipid profile in kolaviron and clomiphene citrate administered Wistar rats

S A Ajayi<sup>1,2</sup>, M O Alese<sup>2</sup>, P U Nwoha<sup>3</sup> and O O Azu<sup>1</sup>

<sup>1</sup>University of Kwa Zulu, South Africa

<sup>2</sup>Ekiti State University, Nigeria

<sup>3</sup>Obafemi Awolowo University, Nigeria

An impaired lipid metabolism is often observed in patients with chronic liver diseases. This work assessed the effects of clomiphene citrate on hepatocytes and possible implication on the lipid profile in female wistar rats as well as the antioxidant role of kolaviron (kv). A total of thirty adult female Wistar rats were divided into six (6) groups: A-F with five (n=5). Group A, were the control; Group B and C received 200 and 100 mg/kg body weight Kv orally once and twice daily for 14 days respectively; group D received 0.50 mg/kg clomiphene citrate orally for 5 days; groups E and F received 200 and 100 mg/kg Kv for 14 days followed by 0.50 mg/kg clomiphene citrate for 5 days respectively. Animals were anaesthetized with halothane inhalation, blood samples were taken through cardiac puncture while the liver tissues were removed and fixed in 10% formal saline for H&E staining. In wistar rats administered with clomiphene citrate, there was a significant decrease in total, LDL and HDL cholesterol levels compared to other groups (p<0.05). The histoarchitecture of the liver revealed necrosis and mild inflammation of the hepatocytes which were not present in kolaviron administered wistar rats. In conclusion, kolaviron is capable of preventing hepatocytes damage and lipid profile alterations caused by clomiphene citrate administration.

[ajayisunday77@yahoo.com](mailto:ajayisunday77@yahoo.com)