Any correlation between BMI, plasma fibrinogen concentration and euglobulin lysis time in obese Africans?

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Background: The persist incidence and prevalence of obesity globally is on the rise. The relationship between obesity as a precursor to the development of diseases has been established, especially in cardiovascular diseases in many literatures. Africans are not excluded from these health burdens arising from obesity.

Objectives: Although there are enormous literatures review on the various biochemical, cellular, molecular/genetics, nutritional, immunological and cultural mechanism, to the upsurge of obesity globally. However, these various factors are yet to be fully elucidated in Africans. This research work is aim at studying the relationship between Basal Metabolic Index (BMI), Plasma Fibrinogen Concentration (PFC) and Euglobulin Lysis Time (ELT) in normal, overweight and obese Africans.

Methods: A total of 138 apparently healthy individuals, 41 obese, 47 overweight and 50 controls age and sex matched were used for this study. Their BMI, PFC and ELT were analyzed using reference method.

Results: The results shows a significant increases in BMI, PFC and ELT (P<0.005) between controls and overweight and between controls and obese respectively. However, there was no significant difference in PFC and ELT (P>0.005) between overweight and obese. There was a negative correlation between BMI and PFC (r=-0.234) (P<0.005) and a positive correlation between BMI and ELT (r=+0.062) (P<0.005) in obese. In addition, there was a negative correlation between BMI and ELT (r=-0.157) (P<0.005) in overweight.

Conclusion: The results obtained from this study shows a significant increase in PFC, ELT and BMI in overweight and obese compare to controls. Negative correlation is there between BMI and PFC, BMI and ELT in over weight and obese Africans. We conclude that, there is hyper fibrinogenaemia and delay fibrin clearing mechanism in obese, PFC and ELT could be use along BMI as a diagnostics tools in assessing obese Africans.

Biography
Adanihomwan Aigbe is a Consultant Biomedical Laboratory Scientist (Researcher) for ten years now. Has been writing professionally since 1997. Areas of interest and specializations are Coagulation/Hemostasis and Haemorrhheology in Health and Diseases. He is presently working on the role of blood haemorrhheology as a cardiovascular marker. He is looking forward to an exchange program/ collaboration work and research internship in laboratory research methods.

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