The effect of different apo(a) isoforms on plasminogen activation in black South African subjects.

Abstract:

OBJECTIVE: The present study evaluates the effect of different apolipoprotein(a) [apo(a)] isoforms on plasminogen activation. DESIGN: A cross-sectional study. SETTING: A rural village (Dikgale district) in the Northen Province of South Africa. SUBJECT: A total of 90 apparently healthy subjects (64 females and 36 males) aged 43 to 67 years participated in the study. RESULTS: The mean lipoprotein(a) [ Lp(a)] level in the subjects was 38.14 +/- 22.34 mg/dl. No association was found between Lp(a) isoforms. When the ratio of Lp(a):plasminogen was less then 1.3, a competitive inhibition was observed, but when the ratio exceeded 1.3, an uncompetitive inhibition was observed with all isoforms. CONCLUSION: The results of the present study suggest that the inhibition of plasminogen activation by Lp(a) is not dependent of apo(a) size.