## CHAPTER 30

# MEDICAL SCIENCES BIOCHEMISTRY

### **Doctoral Theses**

242. HARSIMRUT KAUR

Study of Lipoprotein (a) Levels and APO(a) Polymorphism in Patients with Premature Coronary Artery Disease.

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#### **Abstract**

Investigates the significance of plasma Lipotrotein(a) levels and apo(a) polymorphism as a risk factors for premature CAD in young subjects. The study included healthy controls and young patients with CAD (≤ 40 year). The results of the study suggested that Lp(a) is an important and significant risk factor for CAD in young Indian subjects. Findings on the relationship between positive family history of premature CAD, LMW apo(a) isoforms and high plasma LP(a) levels highlighted the clinical usefulness of LMW apo(a) isofroms in identifying subjects with high familial disposition to develop premature CAD. Further, from studies on the affected families for genetic polumorphism, it may be concluded that childers, particularly sons inherited sets of highly atherogenic genes with respect to lipoprotei (a), from the affected parent (father). Accordingly plasma Lp(a) levels along with apo(a) isoform size may be used as objective laboratory biomarker for assessing the risk of premature CAD. Thus, this information contributes towards better understanding of Lp(a) as a risk factor in Indian scenario and the potential of apo(a) polymorphism as a genetic and predictive marker for premature CAD.

#### **Contents**

1. Introduction. 2. REview of Literature. 3. Material and Methods. 4. Results and Discussion. 5. Summary and Conclusion. Bibliography.