

# **LIPID LEVELS IN ACROMEGALY**

**Ifigenia Kostoglou-Athanassiou, Anastasios Gkountouvas,  
Ioannis Keramidas, Eleni Xanthakou, Fotini Chatjimarkou,  
Philippos Kaldrymidis**

**Department of Endocrinology, Red Cross Hospital, Athens,  
Greece**

**Endocrinologist**

**Department of Endocrinology, Metaxa Hospital, Pireaus,  
Greece**

# Introduction

- **Acromegaly is known to be associated with increased cardiovascular risk**
- **Additionally, acromegaly is known to be associated with disordered carbohydrate metabolism**
- **Lipid levels in acromegaly have not been extensively studied**

# Aim

- **The aim was to study lipid levels in acromegaly**

# Methods

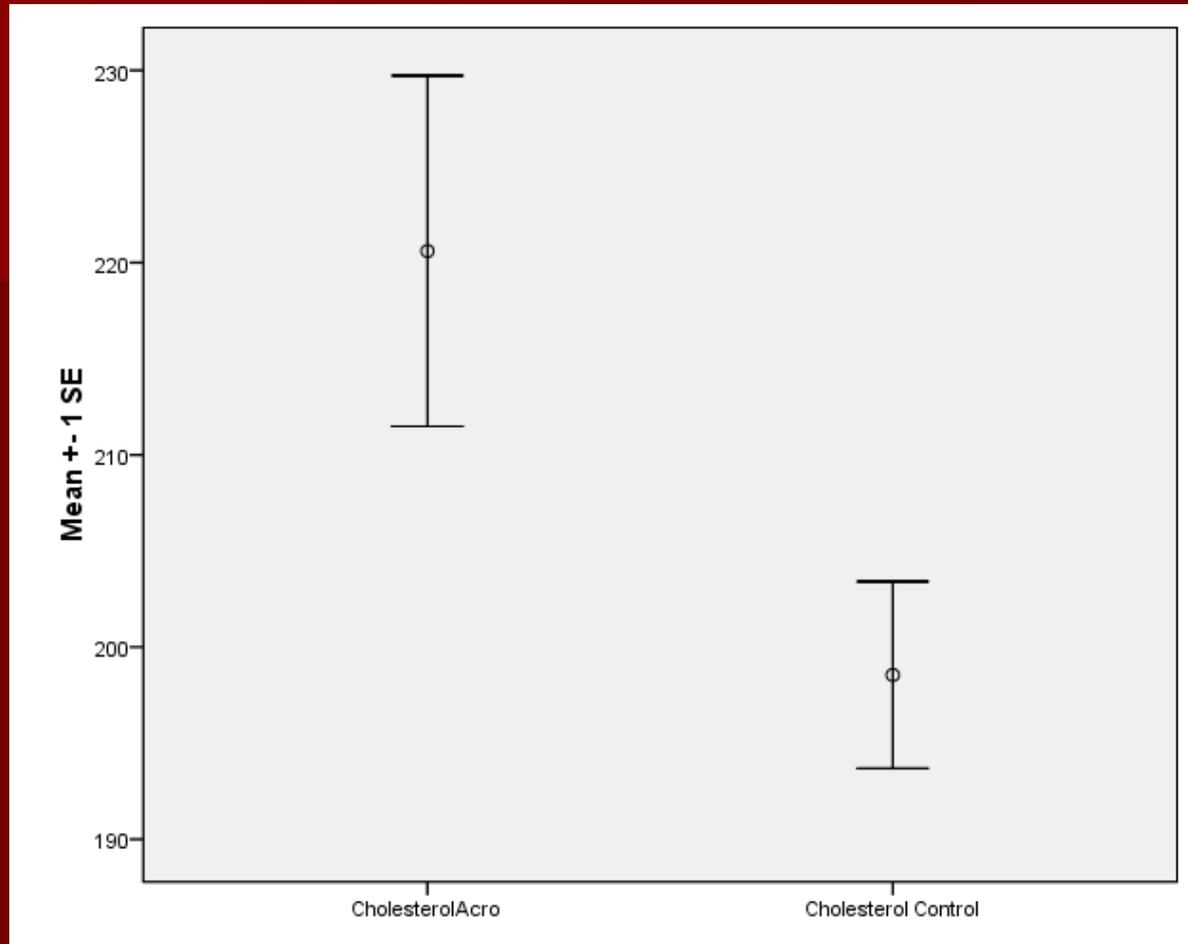
- **In 32 patients with newly diagnosed acromegaly lipid levels were studied**
- **In particular total cholesterol, HDL cholesterol, LDL cholesterol and triglyceride levels were measured**
- **All patients had a pituitary adenoma**
- **All of them had increased IgF1 levels**
- **The measurements were also performed in 32 control subjects matched for age and sex**

# Results

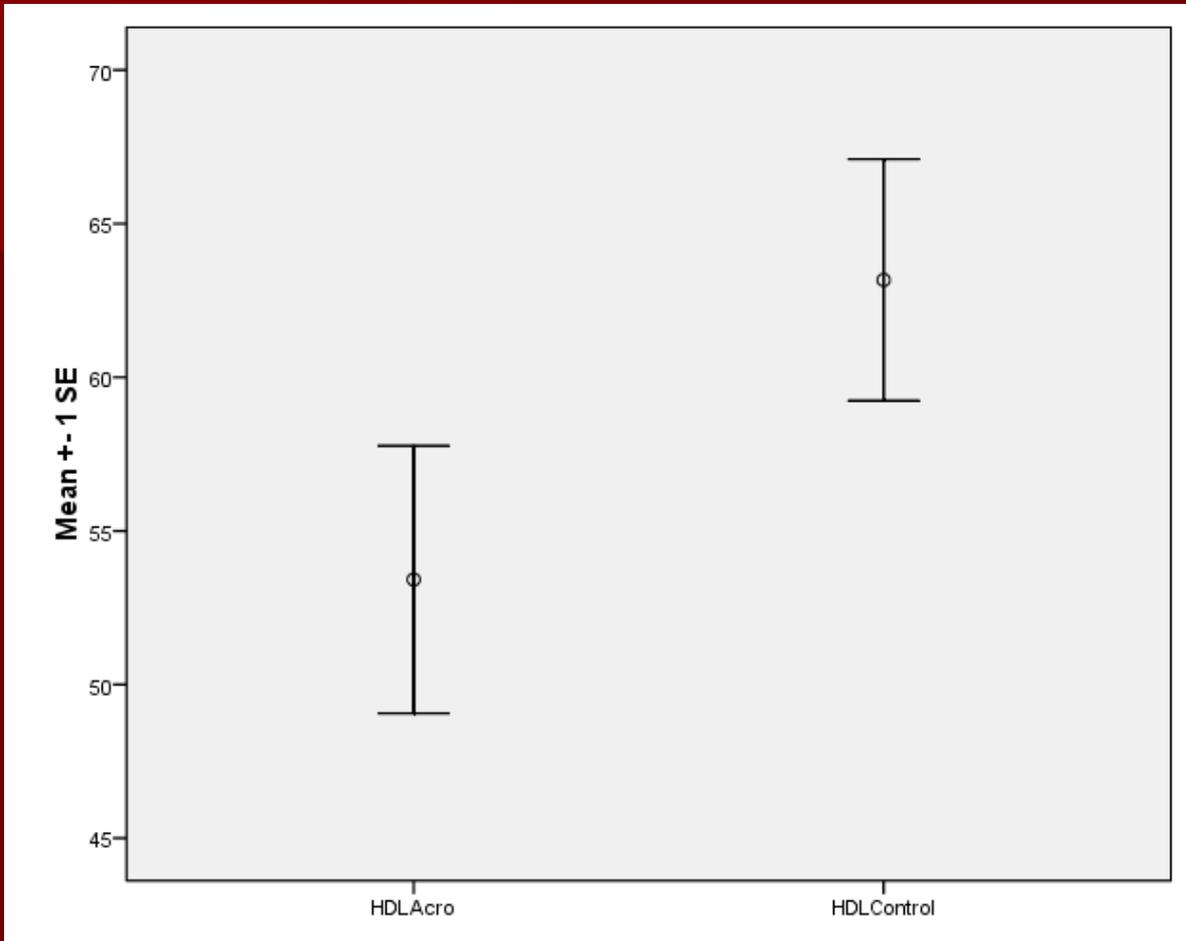
- **Total cholesterol was  $220.59 \pm 8.24$  mg/dl (mean  $\pm$  SEM) in patients with acromegaly as opposed to  $198.55 \pm 4.85$  mg/dl in the control subjects ( $p < 0.001$ , Student's t test)**
- **HDL cholesterol levels were  $52.96 \pm 2.89$  mg/dl in patients with acromegaly as opposed to  $58.44 \pm 3.62$  mg/dl in the control group ( $p < 0.001$ )**
- **LDL cholesterol was  $151.70 \pm 13.77$  mg/dl in the acromegalic patients as opposed to  $114.06 \pm 5.31$  mg/dl in the control group ( $p < 0.001$ )**

# Results

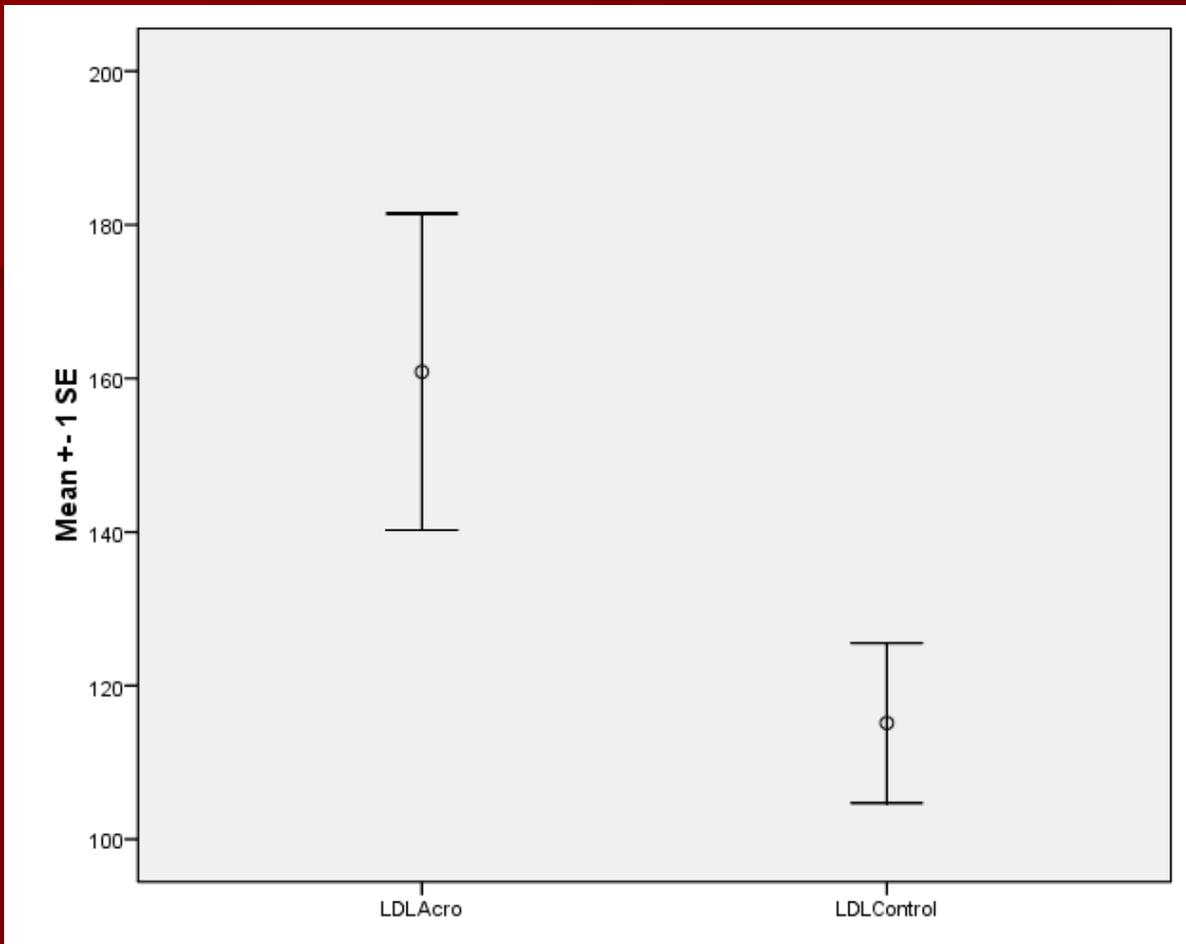
- Triglyceride levels were  $140.34 \pm 14.79$  mg/dl in patients with acromegaly as opposed to  $133.50 \pm 14.27$  mg/dl in the control group ( $p < 0.001$ )
- Thus, total cholesterol, LDL cholesterol and triglyceride levels were increased in patients with acromegaly as opposed to the control group, while HDL cholesterol was decreased



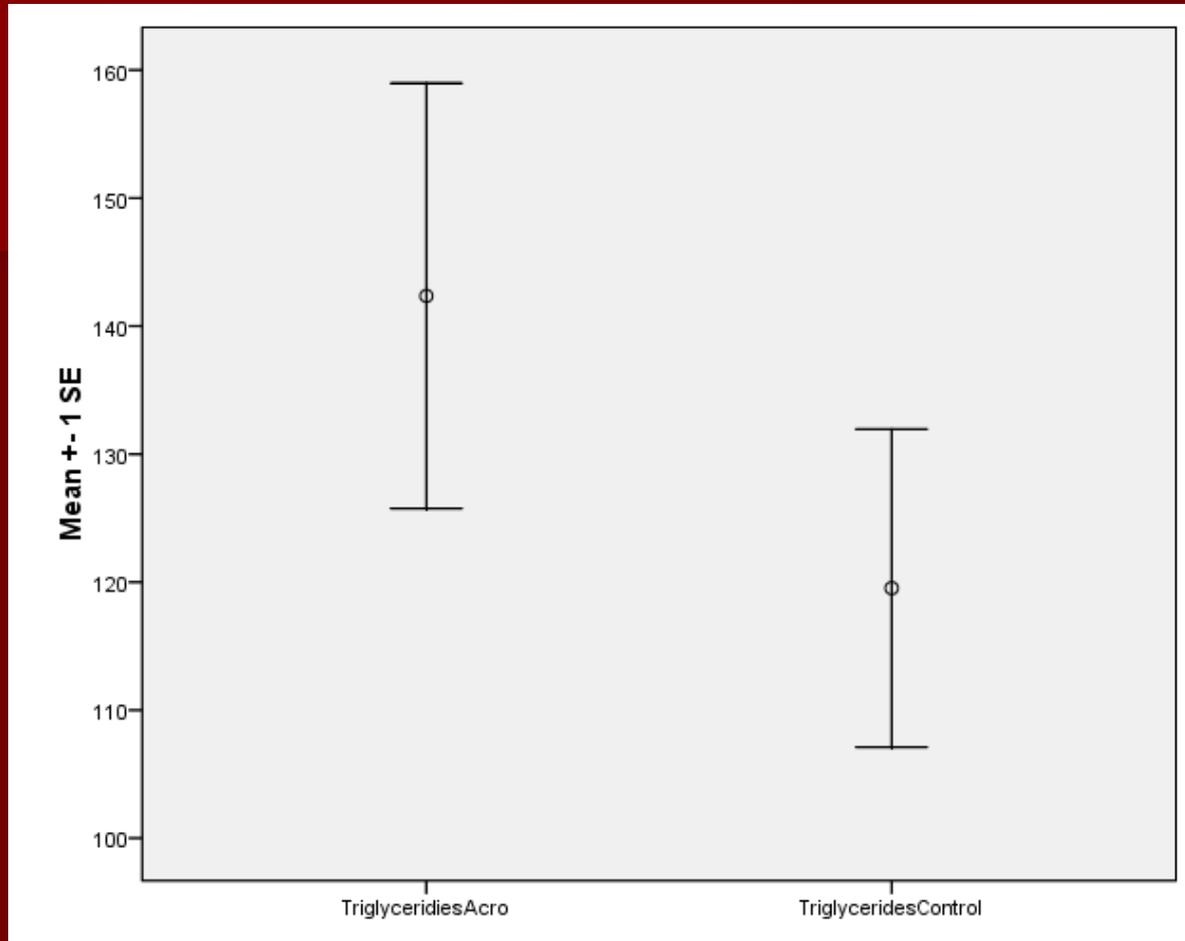
**Total cholesterol in patients with acromegaly and controls**



**HDL cholesterol in patients with acromegaly and controls**



**LDL cholesterol in patients with acromegaly and controls**



**Triglyceride levels in patients with acromegaly and controls**

# Conclusions

- **It appears that acromegaly is associated with a proatherogenic lipid profile, which may contribute to the increased cardiovascular risk associated with the disease**