MATERIALS AND METHODS

Chapter 2

The institutional ethics committee of Sri Ramachandra University approved this study. Three hundred consecutively presenting adults (50 males) with acanthosis nigricans neck were enrolled. History, physical parameters and acanthosis nigricans grades, location and textures were noted. An oral glucose tolerance test (OGTT), fasting serum insulin and homeostasis model assessment of IR (HOMA-IR) were carried out. The acanthosis nigricans grades were correlated to establish any association. Thirty obese controls without acanthosis nigricans were included. OGTT, Fasting serum insulin and HOMA IR were the outcome measures studied.

Chapter 3

A randomized, placebo-controlled, double blinded trial was performed in a university teaching hospital in southern India. One hundred and fifty subjects with AN neck secondary to insulin resistance (IR) were enrolled and randomly assigned to take either metformin or placebo. Both groups received lifestyle modification as an intervention for 24 weeks. Subjects were followed up every 4 weeks and their AN grades and biochemical parameters were measured in addition to other parameters.
Chapter 4

Institutional Ethics Committee approved this study. 150 consecutive adults (69 males) with AN neck secondary to IR were enrolled. Oral Glucose Tolerance Test (OGTT), fasting serum insulin and HOMA IR (Homeostasis Model Assessment for Insulin resistance) were done. Serum adiponectin levels were assessed by assay. 76 normo glycemic controls were compared.

Chapter 5

This study included 24 patients with AN with IR (6 patients in each grade of AN) and 5 normo-glycemic controls without AN. The AN was graded as per Burkes criteria. Grades I and II were considered lower (15) and III and IV (15) higher grades respectively. Both groups were age, sex and BMI matched. Presence of adiponectin receptors in the various layers of the skin was histopathologically studied.