

Section 2

Executive summary of the project (200-250 words)

Serum cystatin C (SCys) is a new marker of glomerular filtration rate and it also predicts morbidity and mortality in cardio vascular disease. Our aim was to study to identify associations of gender and age with SCys and to identify reference range for Scys in a selected apparently healthy Sri Lankans adults .

Hundred and eighteen apparently healthy adults which included 44.9 % males and 55.1% females between 30- 60 years were recruited. Those with diseases and on drugs causing an increase in SCys, blood pressure more than 140/90, random blood sugar more than 200mg/dl , and with estimated GFR < 60 ml/min/1.73m² and with albumin to creatinine ratio>30mg/g were excluded. SCys was measured using particle enhanced immunoturbidimetry using Kone 20XT auto analyzer.

Mean serum cystatin C in the 118 healthy subjects was 0.81 mg/l (\pm 0.12) and levels ranged from 0.5 to 1.14 mg/L . There was no significant ($p>0.05$) difference in mean age between males and females. A significantly ($p<0.05$) higher mean SCys was observed in 51-60 years group and males had a significantly higher mean SCys than females in both 30-50 and 51-60 years groups. Reference ranges for males and females in 30 -50 years were 0.62-1.02 mg/l and 0.55-0.91 mg/l respectively. In the 51-60 years age group the male and female reference ranges were 0.65 – 1.13mg/l and 0.62 – 1.01mg/l respectively.

In selected healthy Sri Lankan adults, age and gender is associated with SCys levels and those need to be considered when interpreting Scys values.