**Op23**

**Epidemiology of non- alcoholic fatty liver disease (NAFLD) in an urban Sri Lankan population**

*Dassqanvake AS1. Rajindrajith S1, Kasthurirathne A!, Kalubowila U1, De Silva AP1, Mizoue* 7°, *Makaya M2, De Silva HJ!*

*Faculty of Medicine, University ofKelaniya ~ International Medical Centre of Japan, Tokyo, Japan*

Background: Non-alcoholic fatty liver disease (NAFLD) is increasing in the Asia-Pacific region. NAFLD

can progress from simple steatosis, through steatohepatitis to advanced hepatic fibrosis, cirrhosis and

hepatoma. Its prevalence in Sri Lanka is not known.

Objective: To investigate community prevalence and risk factors associated with NAFLD among adults in

an urban Sri Lankan population.

Design, setting and methods: The sample consisted of 2985 randomly selected subjects, 35-65 years old,

resident in the Ragama Medical Officer of Health area. NAFLD was diagnosed on ultrasound criteria

(presence of 2 out of 3: increased hepatic echogenicity compared to spleen or kidney, blurring of hepatic

vasculature, deep attenuation of ultrasound signal), and when alcohol intake was <14 units/week for males

and <7 units/week for females. Anthropometric and blood pressure (BP) measurements were made; fasting

blood glucose, lipid profile and serum alanine transaminase (ALT) were estimated (normal cutoff values

were based on revised ATP III criteria of metabolic syndrome for Asians).

Results: 974(35%) individuals had NAFLD [mean age 52.8 years (SD 7.3), 605 (62.1%) females]. On

multivariate analysis, central obesity (BMI>25kg/m2 and/or waist circumference >90cm for males, >80cm

females), elevated fasting plasma glucose (>100mg/dl), elevated diastolic BP (>85mmHg), elevated plasma

triglycerides (>150mg/dl), elevated ALT (>twice the upper limit of normal), and low high density

lipoprotein cholesterol (<40mg/dl for men, <50mg/dl for women) were significantly associated with

NAFLD.

Conclusions: The prevalence of NAFLD among adults in this urban Sri Lankan community is as high as

in western populations. NAFLD is associated with factors that constitute the metabolic syndrome.