

VARIATION IN SERUM CHOLESTEROL,
TRIGLYCERIDE AND PROTEIN
LEVELS IN HEROIN ADDICTION

K. Balasubramaniam, V. Arasaratnam,
N.P. Somasunderam and R. Mahesparan
Dept. of Biochemistry, Faculty of Medicine,
University of Jaffna

Twenty seven heroin addicts and 10 controls, who never took heroin, were chosen randomly from Jaffna Municipality and suburbs. The heroin addicts and controls were all males with a mean age of 26.8 years (± 5.5) and 25.8 years (± 8.6) respectively. Of the addicts, 57% took heroin intravenously and 44% were introduced to heroin when they were abroad. The price per 100 mg heroin was SLR 35/- and it was an impure blackish brown powder. The mean serum cholesterol level of heroin addicts and control were 13.52 mmol l⁻¹ (± 3.26) and 6.89 mmol l⁻¹ (± 1.14) respectively. The elevation in serum cholesterol level of heroin addicts was highly significant ($P \ll 0.001$). The mean serum triglyceride levels of heroin addicts and of controls were 4.57 mmol l⁻¹ (± 2.82) and 1.80 mmol l⁻¹ (± 0.72) respectively. This increase in triglyceride levels of the heroin addicts was statistically significant ($p \ll 0.001$). To interpret the significant elevation in serum cholesterol and triglyceride levels of the heroin addicts the total serum protein levels were estimated. The total serum protein levels of heroin addicts and controls were 88 gl⁻¹ (± 39) and 96 gl⁻¹ (± 32) respectively. The difference was statistically not significant ($P > 0.5$). The average body weights of the heroin addicts and controls were 57 Kg (± 9.8) and 59 Kg (± 8.9) respectively. The difference in body weights was also statistically not significant ($P > 0.5$). These results indicate that these addicts are not malnourished. The elevation in serum triglyceride level and cholesterol level is probably due to the heroin addiction and not due to the poor dietary habits. The results from HIV test showed that none of the heroin addicts had AIDS.