"Achievement is indeed important but what to do with the achievement is more important."
SUMMARY

Prevalence of C.pneumoniae infection was studied in 205 patients of ACS and 90 age and sex matched healthy voluntary controls.

IgG antibodies to C.pneumoniae were estimated by ELISA test in all patients. The patients showing values of IgG antibody titer above 20 RU/ml were considered seropositive, and those with values \( \leq 20 \) RU/ml were considered seronegative. IgG antibodies were also estimated by IIT in 100 patients.

Sensitivity and specificity of the ELISA test as compared to IIT were 70.8\% and 38.4\% respectively. Positive predictive value of ELISA for C.pneumoniae was 51.5\% and negative predictive value was 58.8\%. The diagnostic accuracy of ELISA test for C.pneumoniae was 54.6\%. ELISA test was found to be inferior to IIT as regards sensitivity and specificity.

Seropositivity was significantly higher in patients of ACS (52.7\%) versus controls (29\%).

Smokers had greater prevalence of seropositivity than non-smokers in both groups, but the difference between groups was statistically not significant.

None of the known risk factors for CHD like hypertension, diabetes or hyperlipidaemia either alone or in combination, or family history of CHD had any significant association with seropositivity or seronegativity to C.pneumoniae infection, thereby, indicating an independent causal role of seropositivity as a risk factor in patients of ACS.
Mean plasma fibrinogen and CRP levels were significantly higher in seropositive group as compared to seronegative patients. Fasting blood sugar, serum cholesterol, triglycerides, HDL, LDL and total leucocyte counts remained uninfluenced by seropositivity.

During 6 months follow-up, adverse cardiovascular events occurred more frequently in seropositive group (21.3%) as compared to seronegative group (11.3%). Seropositivity to C.pneumoniae infection may be considered a useful predictor of future adverse cardiovascular events in patients of ACS.

Azithromycin, a powerful antibiotic against C.pneumoniae was administered to 60 seropositive survivors of ACS, the remaining 40 seropositive patients received placebo.

Amongst seropositive patients, adverse cardiovascular events occurred in only 10% of patients who had received azithromycin as compared to 30% of patients who had received placebo. The benefits of azithromycin therapy are thus obvious as occurrence of adverse events (10%) in seropositive patients receiving azithromycin was nearly same as 11.3% prevalence of adverse events in seronegative patients, and 3 times less than 30% prevalence in seropositive patients receiving placebo.