**“EFFECT OF CIGARETTE SMOKING ON VARIOUS HEMATOLOGICAL PARAMETERS IN YOUNG MALE SMOKERS.”**

DR. MRUNAL R. SHENWAI \* 1, DR. MRS. N.V. AUNDHAKAR 2

1 Asst Prof. Dept. of Physiology,Smt.KashibaiNavaleMedicalCollege [SKNMC],

Narhe – Ambegaon, Pune - 41.

2 Professor & Head, Dept. of Physiology, R.C.S.M.Govt.MedicalCollege, Kolhapur.

**Corresponding author** :Dr Mrunal R. Shenwai ; E mail: drpmrunal@yahoo.com

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**ABSTRACT:**

**Introduction:** Coronary heart disease is one of the important causes of mortality in human beings. Cigarette smoking is one of the independent risk factors for coronary heart disease. Smoking increases mortality nearly five times between age group of 30-40 years who are likely to be free from other myocardial risk factors. The present work was undertaken to study the effect of cigarette smoking on various hematological parameters collectively in young & well educated population and compare the results with non-smokers.

**Methods:** The haematological parameters studied were Hemoglobin, Hematocrit, Blood Indices, R.B.C. count, Total leucocyte count and Differential leucocyte count. Total sample size was 70 which included a mixed population of male doctors & engineers [smokers (n=35) & non-smokers (n=35)] between the age group 26-40 yrs. To maintain accuracy all the parameters were studied using Sysmex K-4500Autoanalyser. Differential counts were also done manually.

**Observations:** Our results showed a statistically significant increase in the total leucocyte count (P< 0.01 & Z >2) and lymphocyte count (P< 0.01 & Z >2). The change in rest of the parameters was statistically insignificant.

**Conclusion:** Increased Total leucocyte count and lymphocyte counts found in our subjects may be responsible for the chronic inflammatory state and high risk of coronary artery disease & neoplasia in smokers. Such young population which is otherwise free from the predisposing factors like obesity, hypertension, diabetes etc. can be encouraged to adopt healthier lifestyles and quit smoking so that future health related consequences can be avoided.

**Key words:** young smokers, Sysmex Autoanalyser, hematological parameters,

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