Assessment of Hematological parameters of Young Male with Hookah Smoking in Rania City

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ABSTRACT

Background and aim: Hookah smoking is one of the major causes of cancer and cardiovascular diseases leading to millions of premature deaths each year all over the world. Scientists have identified about 4,000 different substances in tobacco all of which have certain degree of toxic effects, at least 43 of them known carcinogens. The aim of this study is to assess the extent of adverse effect of shisha on hematological parameters in male population of Rania City in Iraq.

Materials and Method: experimental study a purposive (non probability) sample of fifty-five male subjects participated in this study. The method of the study is the following; shisha smoker (n= 30) and non-smoker (n= 25). Fresh peripheral blood samples from healthy adult non-smokers and smokers (males) are collected and analyzed for Red Blood Cells (RBC) count, hemoglobin (Hb) content, packed cell volume PCV , MCV, MCH ,MCHC and RDW, total and differential leucocytes (WBC) counts and total platelets count and its parameters by using fully automatic hematological analyzer.

Results: The smokers of shisha have non-significantly higher level of Hb, HCT, RBCs, WBC count, LYM and platelets counts and its parameters while NUET is insignificantly down in smoker. However, MXD and MCHC are significantly lower in cigarette smokers than that of non-smokers. The present study clarifies that age have no significant effect on hematological parameters except LYM NUET, MID and MCV in smokers. The study shows that the duration of smoking has no significant effect on hematological parameters except LYM and NUET. The current result reveals number of smoking weekly has no significant effect on hematological parameters except NUET.

Conclusion: The study concludes that smoking alters hematological parameter that is injurious to health.

Key words: Shisha, Smoking, Hematology

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