بِسْمِ اللّهِ الرَّحْمَنِ الرَّحِيمِ

قال الله تعالى :

اقْرَأْ بِاسْمِ رَبِّكَ الَّذِي خَلَقَ (1) خَلَقَ الْإِنْسَانَ مِنْ عَلَقٍ (2) اقْرَأْ وَرَبُّكَ الْأَكْرَمُ (3) الَّذِي عَلَّمَ بِالْقَلَمِ (4) عَلَّمَ الْإِنْسَانَ مَا لَمْ يَعْلَمْ (5

صدق الله العظيم

سورة العلق الآيات 1-5

Dedication

To ……

Our lovely parents for their

patience and Support.

Our friends for helping us.

For all those who were there for us.

Acknowledgment

First of all may thanks and praise to Almighty Allah, the beneficent, the merciful, for giving me the health, strength and patience to accomplish this work.

I whish to express my indebtedness and sincere gratitude's and appreciation to my supervisor Dr. Awadia Salman Ahmed for her keen guidance, advice and moral encouragement, continuous comments during the preparation of this study.

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I would like to express sincere thank to all persons for agreement to participate in this study.

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My thanks are extended to my family for their diligence and keenness.

Abstract

This is analytical case control study carried out in Khartoum state during the period from November 2008-March 2009.

The study aimed to asses the cytomorphological pattern of sputum in cigarettes smokers using conventional cytological stain (papanicolaou stain) in addition to the evaluation of the role of Ag NORs in the identification of cytological atypia using silver-nitrate method.

In this study 50 sputum samples from male cigarette smokers were collected as study group, the duration of smoking was 15 years or more, and the number of cigarette smoked is more than 10 cigarette per day, and they were without respiratory tract infections and previous history of lung diseases as test, and 50 samples of sputum from non smokers as control, their age between 22 and 65 years.

Two smears were prepared from each specimen then stained using two different technique papanicolaou stain &silver-nitrate.

Inflammatory cells were detected in both group as 46% acute inflammation and 4%chronic inflammation from smokers group, in non smokers acute Inflammation were detected in 1%, 3%chronic inflammation, with significantly no correlation in the severity of inflammation, and the smoking duration, and number of cigarette per day.

Metaplastic changes were observed in 31%, with a significant correlation to the duration of smoking and number of cigarette per day in test group.

Dysplastic changes were detect in 5% and also a significant correlation to the duration of smoking and number of cigarettes per day. No malignant cells were detected among the study groups.

Ag NOR showed statistical significant difference between the mean of Ag NORs in non smokers 2.170 while it was 4.976 in smoker, and a significant correlation to the number of cigarette per day but not correlated with duration of smoking.

أجريت هذه الدراسه التحليليه في ولايه الخرطوم في الفتره من شهرسبتمبر للعام 2008م الي مارس للعام 2009م هدفت هذه الدراسه لتحديد النمط الخلوي لعينات النخامه عند مدخني السجائر باستخدام صبغه بابانيكولا بالاضافه الي نترات الفضه.

تم اخذ 50 عينه من اشخاص مدخنين رجال بشرط ان يكونوا مدخنين لمدة 15 سنه علي الا قل واكثر من 10 سجارات فى اليوم كفئه اختبار و 50 عينه من اشخاص غير مدخنين .

في هذه الدراسه تم عمل مسحتين من العينات وتثبيتها وصبغها بصب قة بابانيكولا و نترات الفضه وفحصها تحت المجهر .

أظهرت الدراسه وجود خلايا التهابيه حاده فيالفئتان منها 46 حاله اللتهابيه حاده و 4 حاله التهابيه مذمنه في فئه الاختباروعند الفئه الضابطه حاله التهابيه حاده و 3 مذمنه مع عدم وجود علا قه ذات دلاله احصائيه بين شده الالتهاب وعدد سنوات التدخين وعدد السجارات فى اليوم.

أظهرت الدراسه ايضآ وجود خلايا متحوله في 31 من الحالات, وخلايا متعثره النمو فى 5 من الحالات وكان لوجود هذه الخلايا دلاله احصائيه مع مده التدخين وعدد السجارات في اليوم . ولم تظهر هذه الدراسه وجود خلايا خبيثه.

بناء علي متوسط الاجسام النوويه المنتظمه كان الاختلاف بين متوسط المدخنين 4.976 وغير المدخنين 2.170 مع وجود علا قه ذات دلاله احصائيه بين عدد السجائر لكن لم توجد هذه العلا قه مع مده التدخين.

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