Dedication

Due to their support, pushing and care during all the hard work and their determination for my research to succeed and this work exist in this final form. I dedicate it with my love to....

- My mothers... the river of kindness and support,
- To my mother on the sky, who had one wish which is how we will be the best in this world, I say to her I am here.
- To my fathers... the candle of knowledge, my dad who helped me with the writing of part of this research.
- To my sisters and brothers, for their continuous and unconditional support.
Finally to Mr. Mohammed Elamin whom I couldn’t without his help complete this thesis.

I wish them all great success and happiness in their lives...

Acknowledgements
My great thanks to Allah who lightened my way and paved my road vanishing all the barriers that I faced…
I had the honor of working with Dr. Munsoor Mohammed Munsoor, and I would like to express all my gratitude for all the help, guidance and support he provided to me.
I would like to convey my sincerest thanks to my colleague in Sudan University of science and technology (Hager Khalil Mohammed) for help in this research by assisting me with the specimen collection.
My appreciation extends to (Mohammed Elamin Mustafa) and (Eman Osman Mohammed)
for their co-operation and kind help with writing. My deep thanks to (Dr. Malik Elfadni) and (Dr. Tarig El-misbah) and the laboratory assistants, (Ust. Khalid Rahmatallah khidr) who have kindly guided and worked on my data analysis.

Abstract

This is a cross-sectional descriptive and analytical study, conducted at Khartoum teaching hospital during the period from March 2010/September 2010. The aim of this study was to estimate the fibrinogen level in Sudanese smokers who attended in Khartoum teaching hospital. Sixty Sudanese healthy smokers were informed about the study and their agreement for participation was obtained. The study population was divided in to three groups according to the duration of smoking and number of cigarettes smoked per day as follows:

The first group was smoking for less than 10 years, the mean of fibrinogen level was 3.33g/L, while the second group were smoking for 10 to 20 years, the mean of fibrinogen level was 5.39g/l. And the third group was smoking for more than 20 years, the mean of fibrinogen level was 7.14g/l.

According to the number of cigarettes smoked per day the population was also divided into three groups, the mean of fibrinogen level was 3.41g/l in the first group who smoked less than 10 cigarette /day, 5.7g/l in the
second group who smoked from 10 to 20 cigarette /day, and 6.97g/l in the third group who smoked more than 20 cigarette /day.
The results obtained indicated that the fibrinogen level was in the normal range in the first group according to intensity and duration of smoking. But in comparison with control group, fibrinogen level was statistically higher. While the fibrinogen level was much raised in the other groups and the rise is statistically significant in comparison with control group, p value=0.000.
Finally, In conclusion the results obtained in the current investigation proved that smoking increased the level of fibrinogen and the increase in level is directly related to the duration of smoking and number of cigarettes smoked/day.
هذه دراسة مقطعية وصفية وتحليلية، أجريت في مستشفى الخرطوم التعليمي خلال الفترة مارس 2010 / سبتمبر 2010. وكان الهدف من هذه الدراسة تقديم مستوى الفيبرينوجين في دم المدخنين السودانيين. وقد تم الحصول على موافقة ستون مدخنا للمشاركة في هذه الدراسة حيث تم تقسيم مجتمع الدراسة إلى ثلاث مجموعات وفقا لمدة التدخين وثلاثة مجموعات أخرى وفقا لعدد التدخين السجائر المستهلك يومياً.


وفقا لعدد السجائر في اليوم الواحد قسم المدخنين إلى ثلاث مجموعات أيضاً:

وكان متوسط مستوى الفيبرينوجين 4.1 جرام / لتر في المجموعة الأولى الذين يدخنون أقل من 10 سجارة يوميا ، 5.7 جرام/لتر في المجموعة
الثانية الذين يدخنون من 10 - 20 سيجارة يوميا، و 6.97 جرام /لتر في المجموعة الأخيرة الذين يدخنون أكثر من 20 سيجارة يوميا. وتشير النتائج إلى أن مستوى الفيبرينوجين كان في المعدل الطبيعي في المجموعة الأولى وفقاً لكتافة ومدة التدخين، ولكن بالمقارنة مع المجموعة الضابطة، كان مستوى الفيبرينوجين أعلى إحصائياً. كان مستوى الفيبرينوجين زائداً في المجموعات الأخرى مقارنةً مع المجموعة الضابطة، إحصائياً قيمة المعنيّة كبيرة = 0.000. نخلص إلى أن مستوى الفيبرينوجين يزيد وفقاً لمدة التدخين وعدد السجائر في اليوم الواحد.

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<td>ADP</td>
<td>Adenosine diphosphate</td>
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<tr>
<td>PDGF</td>
<td>Platelet-derived growth factor</td>
</tr>
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<td>TG-alpha</td>
<td>Transforming growth factor alpha</td>
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<td>ATP</td>
<td>Adenosine triphosphate</td>
</tr>
<tr>
<td>GP</td>
<td>Glycoproteins</td>
</tr>
<tr>
<td>VWF</td>
<td>Von willebrand factor</td>
</tr>
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<td>HMWK</td>
<td>High molecular weight kininogen</td>
</tr>
<tr>
<td>TFPI</td>
<td>Tissue Factor Pathway inhibitors</td>
</tr>
<tr>
<td>PAF</td>
<td>Platelet activating factor</td>
</tr>
<tr>
<td>DIC</td>
<td>• disseminated intravascular coagulation</td>
</tr>
<tr>
<td>HDL</td>
<td>High density lipoprotein</td>
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MAO | Monoamine oxidase
---|---
HPA | Hypothalamic-pituitary axis
IL | Interleukin
TNF | Tumor necrosis factor
CRH | Corticotrophin releasing hormone
IRS-1 | Insulin receptor substrate-1
CRP | C-reactive protein
SPSS | Statistical package for social science
CA | Coagulation analyzer

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