الآية

يسُمِّي اللَّهِ الرَّحْمَنُ الرَّحِيمُ

قال تعالى:

الله لا إلَهَ إِلَّا هُوَ الْحَيُّ الْقَيْمُ لَا تَحْذَرُهُ شَيْءٌ وَلَا تَتوُّمُ لَهُ مَا في السَّمَآوَاتِ وَمَا فِي الْأَرْضِ مِن ذٰلِكَ الَّذٰي يَشْفَعُ عَنْهُمْ إِلَّا يَأْذِينَهُ يَعْلَمُ مَا بَيْنَ أَيْدِيهِمْ وَمَا خَلْقَهُمْ وَلَا يُحِيطُونَ بِشَيٌّ مِّنْ عَلَمِهِ إِلَّا يَأْتِيَهُ سَاءٌ وَسَيِّئٌ كُرْسِيٌّ السَّمَآوَاتِ وَالْأَرْضِ وَلَا يُؤْوِدُهُ حَفْظُهُمْ وَهُوَ الْعَلِيمُ الْعَطِيعُ

صدق الله العظيم

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Dedication

For
All those times yours stood by me
For
Every dream yours made comes true
For
All the love I found in yours
I will be forever thankful mama & dad

For
All those who help me up & never let me fall
For
All those who suffered from absence of assistance
I dedicate this study....
Acknowledgment

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Abstract

This is a descriptive study conducted at Khartoum State, at different petroleum stations and Sudan University of Science and Technology during the period from June to November 2009. This study aimed to identify the pathological changes in oral mucosa and presence of phenol in urine among petroleum station workers. The study group included 200 persons. Divide as follows: 100 specimens were collected from petroleum station workers who exposed to petroleum products for more than 5 years, with a daily period of exposure more than 10 hours a day. The selected group was free of oral lesion and previous history of oral disease. Their ages ranged between 20 to 62 years. The other 100 specimens were collected from individuals not exposed to petroleum products.

Smears were prepared, fixed and stained with Papanicolaou stain, then examined under light microscope. The urine samples taken to assess poisoning degree resulted from petroleum substance through measuring the phenol in the urine by using Folin-ciocalteou reagent. The result of urine is shown positive outcomes in both the targeted groups. The pathological assessment among study group revealed the following finding: 10% bacterial infection features, 2% fungal infection features, 6% non specific inflammatory changes, 2% mild diskaryosis and the rest 80% were normal. In other control group found some infections, which may be related to other confounder factors and not the exposure to petroleum substances.

This study concluded that, there is a positive association between pathological finding and exposure to petroleum products. However this difference was not significant statistically. And the presences of phenol in the urine of individuals exposed to petroleum products are not specific in this study.

This study recommends that, more studies should be conducted to address this topic as its serious problem we recommend using sputum rather than buccal smear. For better assessment raise study group should be included and use another method
to detect phenol rather than “Folin-ciocalteou reagent” because it’s qualitative method and non specific. Is better measuring Urinary phenol by using the colorimetric quantitative determination method, this give urinary phenol values corrected for creatinine content. Also we recommended use more than one stain.
توصي هذه الدراسة بالإجراء دراسات أكثر لتغطية هذا الموضوع نسبة لخطورته، ونوصي بإستعمال اللعاب بدلاً من مسحة الفم للحصول على أفضل تقييم يجب رفع مجموعة الدراسة واستعمال طريقة أخرى للكشف عن الفينول غير الدوالي سيكون لها طريقة نوعية وغير محددة وأفضل الكمية، هذه الطرق تعطي قيم colorimetric صحيحة لمحتوى الكرياتين في الفينول البولي، ونوصي أيضا بإستعمال أكثر من صبغة.
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