Author's response to reviews

Title: Cardiotoxicity of Freon among refrigeration services workers: comparative cross-sectional study

Authors:

Laila ME Sabik (lailasabik714@hotmail.com)
Reem A Abbas (reemabbas@netscape.net)
Mahmoud M Ismail (malawadi@gmail.com)
Safwat El-Refaei (safwat_elrefai@hotmail.com)

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Author's response to reviews: see over
Dear Editor –in-chief:

Enclosed is the manuscript by Sabik et al. titled Cardio-toxicity of Freon among Refrigeration Services Workers after doing the recommended corrections.

This manuscript is being submitted to you for possible publication in the "Environmental Health Journal". This research paper is new and is not being published or even refereed elsewhere. The authors believed that it is a very important area of research as Freon is considered one of the major gases causing global warming which in turn increases the needs and the utilization of people to all types of refrigerants to over come the hot climate. This communities and countries trend makes large number of workers involved in the refrigeration related industries; so many workers became exposed to this hazardous chemical which is being strongly associated with many common health problems in our societies such as hypertension, CAD, and arrhythmias. So, we hope from publishing this research in your respectable journal to arouse scientists, employers and workers especially in developing countries about the possible cardiac hazards of Freon to take the corrective actions needed.

Sincerely,

Dr. Laila Sabik , MD

Lailasabik714@hotmail.com

Assistant Professor of Clinical Toxicology

Zagazig University

Sharkia Governorate , Egypt
Comments:

I received copy of the manuscript that you send to me on Thursday, 25 June and your mail that said (You should now check over your manuscript very carefully for any small typographical changes you would like to make. This is the proofing stage, and once your manuscript is published in provisional form you will not be able to change the content of your manuscript again.)(We would ask that you confirm that your manuscript is acceptable, or return any revisions by Thursday, 02 July 2009.)

So, I carefully review the copy of the manuscript and found some typographical mistakes in the form of (punctuation mistakes & some spelling and grammars mistake).

I would like to correct it in this proofing stage. I download the main copy from the website you send it to me and make some corrections, I will pass step by step in this covering letter to demonstrate the corrections.

Firstly:

I think when I put at the end of sentences (and) , it should be without (comma ), i.e (1, 2, 3 and 4) and not (1, 2, 3, and 4).

I found (, and) in many sites in the manuscript, I make correction in the places that I found:

For example:

* in abstract (Background):
The purpose of the present study is to investigate whether occupational exposure to fluorocarbons induces arterial hypertension, myocardial ischemia, cardiac arrhythmias, elevated levels of plasma lipids, and renal dysfunction.

*The purpose of the present study is to investigate whether occupational exposure to fluorocarbons induces arterial hypertension, myocardial ischemia, cardiac arrhythmias, elevated levels of plasma lipids and renal dysfunction.

* in abstract (method)

2nd page
The study included 23 apparently healthy male workers at the refrigeration services workshop who were exposed to fluorocarbons (FC 12, and FC 22).

Correction (FC 12 and FC 22)

Some spelling and grammars mistake corrections:

* in 2nd page abstract (results)

*7th line:
though no significant statistical differences was found in arterial blood pressure measurements between the two study groups. **Correction**

*though no significant statistical differences were found in arterial blood pressure measurements between the two study groups.

* in 3rd page

*5th line:
Most laboratory investigations revealed (an) absence of significant statistical differences for lipid profile markers, serum electrolyte levels and glomerular lesion

**page 4**

**Background**
Fluorocarbons are a group of synthetic halogen-substitute methane and ethane **Correction**
Fluorocarbons are a group of synthetic halogen-substituted methane and ethane

*page 5*
Thus, this study was conducted to…………………..
the glomerular and tubular functions of the renal function based on the hypothesis that arterial hypertension in subjects with overexposure to CFCs may be precipitated by renal proximal tubular damage. **Correction**
Thus, this study was conducted to…………………..
the glomerular and tubular functions of the kidney based on the hypothesis that arterial hypertension in subjects with overexposure to CFCs may be precipitated by renal proximal tubular damage.

*page 9*
**Ambulatory Electrocardiography (Holter Monitoring):**
5th line
Monitoring was conducting throughout 24-hour period while the workers keep a diary of their **Correction**
Monitoring was conducted throughout 24-hour period while the workers keep a diary of their

*page 10*
**Lipid Profile Study:** LDL & HDL **Correction** LDL and HDL

*page 12*
**Environmental Assessment:** to assess the occupational exposure………..

2nd line: compared to the threshold limit values of the American Conference of Governmental Industrial Hygienists (ACGIH) TWA (Time Weight Average) PEL (permissible exposure limit).
Correction compared to the threshold limit values of the American Conference of Governmental Industrial Hygienists (ACGIH) (TLV-TWA) (threshold limit value - time Weight Average).

**Discussion**
However, two cases of acute, massive freon exposure preceded secondary arterial hypertension, and a fatal case of myocardial infarction occurred in an elderly man exposed to decomposed freon-22 [9,23].

Moreover, it was found that, fluorocarbons produce both hypertension and cardiac arrhythmias through damage to the endothelial barrier in the vascular system, activation of leukocytes and platelets, initiation of plaque formation, stimulation of the inflammatory response, kidney-related hypertension, and direct damage to cardiac and blood vessel tissue[38].

Moreover, it was found that, fluorocarbons produce both hypertension and coronary artery disease through damage to the endothelial barrier in the vascular system, activation of leukocytes and platelets, initiation of plaque formation, stimulation of the inflammatory response, kidney-related hypertension, and direct damage to cardiac and blood vessel tissue[38]

endogenously (such as anger, fear, excitement, and severe exertion), or exposed to epinephrine or other sympathomimetic amines, e.g., bronchodilator and nasal decongestant, may have increased susceptibility to the toxicity of excessive exposure [5, 25].

endogenously (such as anger, fear, excitement and severe exertion), or exposed to epinephrine or other sympathomimetic amines e.g. bronchodilator and nasal decongestant, may have increased susceptibility to the toxicity of excessive exposure [5, 25].

**Conclusions**
In conclusion, ............

**Finally, environmental assessment of the workshop of refrigeration workers found to exceed the threshold limit value. Therefore, substitution of the non-hydrogenated fluorocarbons (CFC) and chlorine-containing hydrogenated fluorocarbons with chlorine-free hydrogenated****

I readjust the red sentences as below, I think by this way it give better meaning :
Conclusions
In conclusion, .........

Finally, environmental assessment results for freon in the refrigeration services workshop were found to exceed the threshold limit value. Therefore, substitution of the non-hydrogenated fluorocarbons (CFC) and chlorine-containing hydrogenated fluorocarbons with chlorine-free hydrogenated

Abbreviations:

HFC (hydrofluoric carbons)  I corrected it as follow: (hydrofluorocarbons)

ECG (electrocardiograms) I corrected it as follow ECG (electrocardiogram)

LDL (Low density lipoprotein) I corrected it as follow LDL (low density lipoprotein)

NIOSH (The National Institute for Occupational Safety and Health) I corrected it as follow NIOSH (National Institute for Occupational Safety and Health)

I hop that all things are all right new after this check, I do my best to exclude any mistake even punctuation mistakes like (comma) from the final revised copy. To achieve your acceptance.

I hop hearing good news shortly.

With my best wishes.

Dr. Laila Sabik, MD

Lailasabik714@hotmail.com