



SDI Review Form 1.6

Journal Name:	International Journal of TROPICAL DISEASE & Health
Manuscript Number:	Ms_IJTDH_36186
Title of the Manuscript:	SDS-PAGE and Densitometric analysis of Myofibrillary Proteins : Actin and Myosin in Skeletal Muscle of Fluoride intoxicated rats
Type of the Article	Original Research Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Compulsory REVISION comments	The authors must present the background to a scientific question. No hypothesis In the summary redundancy must be eliminated in the results. Since in rats, muscle contraction was not evaluated, so there is no basis to assert damage in this function. The damages described in previous papers caused by the consumption of NaF should be described. Based on which basis the doses administered were determined? Which muscle dissected and how did the muscles homogenize? With what equipment, and under what conditions? How much total protein was loaded into each gel lane. What is the age and sex of rats? What is the brand and purity of NaF? Which coomassie was used? G250 for polypeptides; R250 for proteins? With which procedure did they stain the gel? As coomassie marks any type of protein, it is not possible to state that the bands of the gel correspond to actin and myosin. They should repeat the SDS-PAGE for all samples running high purity standards of actin and myosin on the same gel. When they reliably demonstrate which bands correspond to actin and myosin, they should describe which analysis protocol they used with Image J software. It is necessary to specify the number of samples studied and after analyzing them with Image J, statistical tests should be done.	- The dose of NaF to induce toxicity was selected based on the published literature and earlier studies conducted. - At the end of the experimental period, rats were fasted overnight and anaesthetized using ether anaesthesia .Skeletal muscle tissue were dissected out in ice-cold saline . The tissues were weighed and 10% tissue homogenate was prepared using a ultrasonic homogenizer (Phoenix) with the 0.1 M Tris-HCLbuffer , pH 7.5. After centrifugation at 2000 rpm for 10 minutes, the clear supernatant was used for biochemical assay. - The amount of total protein loaded to each gel lane was 30ul. - 8 weeks old , Wistar albino rats of both sexes were used. - Sodium fluoride (NaF , 99% pure, Loba chemie, Mumbai, India) was used. - Commasie Brilliant Blue G250 for polypeptides was used to stain the gel. - When tissue sample was fully purified for actin and myosin on SDS-PAGE than the bands were analyzed using Image J software..In first lane, there was a protein ladder that ranges molecular weight of actin and myosin. Image J



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	Without the actin and myosin standards in the same gel with the samples, it is impossible to affirm any effect by the NaF. It can not be concluded that NaF affects muscle contraction because they did not perform the corresponding analyzes. The same with respect to the proteolytic action on myofibrils.	software confirms presence of same proteins on the basis of molecular weight on comparing bands of protein ladder and bands obtained after running samples. As far as analysis of bands through software Image J is concerned, it is an open source image processing program designed for scientific multidimensional images.
<u>Minor</u> REVISION comments		
<u>Optional/General</u> comments		