Author's response to reviews

Title: Evaluation of antiarthritic activity of Strychnos potatorum Linn seeds in Freund's adjuvant induced arthritic rat model - Its Effect On haematological and biochemical changes

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Author's response to reviews: see over
Reviewer's report

Effect of Strychnos potatorum Linn seeds on haematological and biochemical changes Title: in adjuvant
induced arthritic rats.

Version: 1 Date: 5 March 2007

Reviewer: Jose Luis Rios

Reviewer's report:

General

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be
reached)

Why the authors did not measure swelling paw of arthritic rats? It is probably the most relevant
paramether, while the body weight is a complementary data together some of the results included in
this paper.

Swelling paw volume was measured already. But it was kept to publish along with other parameters. As
it is required it is included in the article now.

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the
author can be trusted to correct)

Background:

first line: delete Fam. (Loganiaceae)

It is mandatory to give the family of the species. That’s why it is included.

third line: delete cures and change by anti-inflammatory, ...

The term used in the traditional medicine is given as cures as it appears in the reference book.
Second paragraph: nux-vomica for botanical (latin) name.

Figures:

Figure 1 should be modified. It is not relevant the representation of Body weight vs groups. Please, change by a new graph Body weight vs time, and each line will represent the effect of each extract.

In such case the graph will be very complicated and it is difficult to make. Clarity of the values will not be there. That's why it is made as body weight Vs groups. If still the reviewer needs it can be made.

Discretionary Revisions (which the author can choose to ignore)

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest: An article of limited interest

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests

Reviewer's report

Effect of Strychnos potatorum Linn seeds on haematological and biochemical changes Title: in adjuvant
induced arthritic rats.

Version: 1 Date: 5 March 2007

Reviewer: Kamal Moudgil

Reviewer's report:

General

The authors have examined basic biochemical and general hematological parameters in Wistar Albino rats treated with SPP and SPE prepared from Strychnos potatorum Linn seeds. These are general systemic parameters that can be influenced widely by diverse set of disease conditions that induce local/systemic inflammation. There is no specificity in the parameters study that links them with particular disease processes in adjuvant arthritis (AA). Most of the anti-arthritic agents that are capable of suppressing AA can induce similar changes in hematological and biochemical parameters tested. The manuscript would significantly improve in scope and impact if authors could provide information about how SPP and SPE prepared from Strychnos potatorum Linn seeds induce protection from AA, particularly the pathways that mediate anti-inflammatory effects of these plant products. At present there is no data to support the mechanistic basis of the anti-arthritic activity of Strychnos potatorum Linn. This study merely reports that Strychnos potatorum Linn seeds can suppress AA, and therefore, in the absence of any mechanisms involved, this report is really is a premature report of an otherwise interesting finding.

The parameter of antiarthritic study i.e the rat paw edema volume is included. As it was planned to add with other parameters for publication, initially it was not included. Anyway as it is asked it is included. Also the acute phase proteins estimation is also significant for antiarthritic activity where it is also included in the article. Apart from that the manuscript highly related and discussed about the abnormalities of the arthritic condition in terms of haematology and biochemistry and enumerated the changes and rectification by the extract. The antiinflammatroy activity of the plant is already reported by us with the reference (E. Sanmuga priya, S.Venkataraman “Antiinflammatory effect of Strychnos potatorum seeds on acute and sub acute inflammation in experimental rat models” “Pharmaceutical biology” 45(6), 435-439, 2007.) with this extension the antiarthritic study was undertaken. Regarding the mechanism of action the detailed study is undergoing in molecular level to find out the possible mechanism. In the above mentioned reference the anti-inflammatory activity of the plant was proposed to be due to the presence of various phytochemicals like steroids, triterpenes and saponins in the plant.

The histopathological, radiological, other biochemical parameters like lysosomal enzymes, glycoproteins, ATPases etc have also been studied as a proof of the antiarthritic study. If it is required it can also be included. But the length of the article will be subjected to the journal consideration.
Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

Discretionary Revisions (which the author can choose to ignore)

What next?: Reject because too small an advance to publish

Level of interest: An article of limited interest

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests